REPORT RESUMES

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THE BASIC COURSES AT STEPHENS, REVISION AND PROJECTION.

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IN ORDER TO PROVIDE A BROAD FOUNDATION FOR A GENERAL-LIBERAL EDUCATION, STEPHENS COLLEGE HAS DEVELOPED SIX "BASIC COURSES" WHICH EMPHASIZE THE RELEVANCE OF CENTRAL CONCEPTS IN DIFFERENT FIELDS OF INTELLECTUAL ACTIVITY TO MODERN LIFE. THE SIX COURSES ARE "GENERAL HUMANITIES," "CONTEMPORARY SOCIAL ISSUES," "ENGLISH," "BASIC BELIEFS IN HUMAN EXPERIENCE," "FOUNDATIONS OF NATURAL SCIENCE," AND "THE CONTEMPORARY AMERICAN WOMAN." THE COURSE DESCRIPTIONS PRESENTED CONSIDER THE CONTENTS OF THE COURSES, REVIEW METHODS OF INSTRUCTION AND EVALUATION OF STUDENT ACHIEVEMENT, AND INDICATE THE STEPS BEING TAKEN TOWARD COURSE REVISION AND DEVELOPMENT. (AD)

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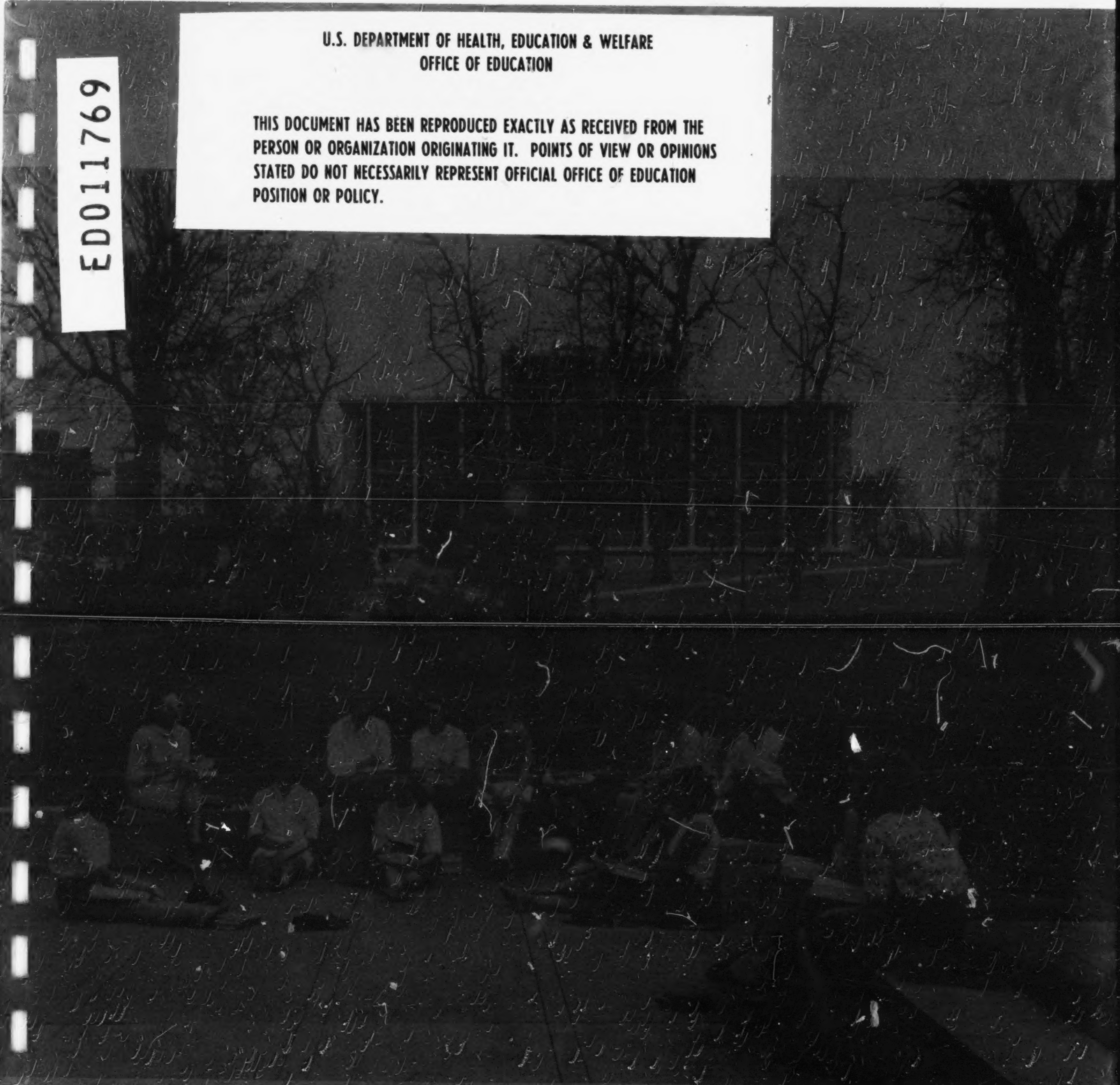

The Basic Courses at Stephens . . .

a revision, a projection

Stephens College Educational Report: II

JC 670 313

STEPHENS COLLEGE EDUCATIONAL REPORT: II

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THE BASIC COURSES AT STEPHENS

Revision and Projection

Edited by

Ralph C. Leyden

Director of Educational Development

UNIVERSITY OF CALIF.
LOS ANGELES

MAY 1 1967

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

Description and report on the development and revision of a set of basic courses. Submitted to The Fund for the Advancement of Education by Stephens College, Columbia, Missouri, January 1966. Seymour A. Smith, President

Stephens College
Columbia, Missouri, U. S. A.

JC 670 313

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INTRODUCTION

by

Ralph C. Leyden

Any dynamic educational program inevitably undergoes almost constant change. When an institution and its faculty commit themselves to an experimental approach to education and teaching, recurrent reexamination and development of courses and curriculum become a necessity. Such is the case at Stephens College.

Over the past half century, Stephens College has participated vigorously in the national movement for the development of courses basic to the general and liberal education of students. Some of these courses such as _General Humanities_ were pioneered on the Stephens campus. Others were introduced concurrently in a few experimental institutions. Over the years the College has maintained its participation in projects to improve undergraduate education through cooperative efforts, particularly as these have related to _basic course_ developments in the humanities, science and social science.

The latest opportunity to give concentrated attention to a review of the basic courses, their structure and function, came with the awarding of a $160,000 grant from the Fund for the Advancement of Education to Stephens College to support experimentation with a proposed House Plan organization and a core course development. The concentration on course development was looked upon as having particularly rich potential for effective education in a House Plan which emphasized close relationships between living and learning. Opportunities for integration and interrelation among subject fields and interaction between learning and living situations, usually separated in the typical campus pattern, were to be exploited. The story of the House Plan project is reported in another publication to be released from Stephens College. Five of the six basic courses described in this report have been used as core courses in the House Plan experimentation although no more than four have been included in any one House Plan program.

The six courses reported here represent those which emerged from the 1959-1963 study with faculty approval and designation as basic courses. They were also conceived of as a set of basic courses in that they complement each other and provide a broad base for a general-liberal education. They view contemporary expressions of our culture as man's newest efforts to give artistic, scientific, social, political and philosophic form to his deepest, most enduring needs. They attempt to reveal the past in an exciting and vital way as it shapes and exists in our present. They enable students to explore the ranges of knowledge and to acquire the intellectual skills needed for intelligent, thoughtful, balanced living.

The College strongly encourages students to include these six in their two years of study leading to the Associate in Arts degree unless they have already acquired the background of a given field. This election (except in the case of English 101-102 which is required during the freshman year) is considered and decided under the guidance of a faculty adviser. Any of them (again with the exception of English 101-102) may be taken during either the first or second year, although the most frequent pattern is to include three or four of them in the freshman year.

A description of any growing or developing course is apt to be soon outdated. Such will surely be the case with the courses described here. Nevertheless, we believe that the identifying of important characteristics of such basic courses is useful not only for the formal record of accomplishment and change, but to the faculty of this College for the new insights it generates.

Although prepared primarily as a formal report to the foundation granting support and for the faculty of Stephens College, this report is also made available to others similarly engaged in course development. It may provide them with suggestions of trends to follow or not to follow.

For comparability, each description employs the following outline:

1. What makes the course basic?
2. What is the basic content of the course?
3. What are the principal methods of instruction?
4. How is student achievement evaluated?
5. What experimentation has accompanied the course development reported here?
6. What are the new directions of the course and those that need further study and development?

Certain of the courses described here can aptly be termed "new" courses. Foundations of Natural Science departs in its structure and emphases from previous and common taxonomical approaches in beginning science courses. Here the emphasis is upon fundamental concepts of matter and energy and their phenomena, upon the scientific mode of inquiry as a contributor to knowledge and upon the nature of our world--man's understanding of it and his functioning within it. It is intended to provide for the layman a philosophic and informational base for further reading and understanding of science and at the same time provide potential majors, not only the first steps of a deductive system leading to the highly specialized disciplines, but also a last general look at a greatly fragmented discipline.

The Contemporary American Woman is a wholly new course that seeks to meet the needs of women students. Although much has appeared in the literature of sociology and in the public press during the last few years about the understanding of women, their place in our society, society's expectations from them and concerning them, little or no attention has been given to the inclusion of such study in the education of women. This course represents a pioneering effort to do so. It is the latest of the courses to be included in the set of basic courses and is still undergoing much study and change.

Some of the courses presented have been in the Stephens curriculum for many years. All are presented here in the order of their introduction into the curriculum.

General Humanities
Contemporary Social Issues
English 101-102 (formerly "Communication")
Basic Beliefs in Human Experience
Foundations of Natural Science
Contemporary American Woman

New Directions

One of the most useful outcomes of such a study as this is that a staff may become better acquainted with new developments not only in their own field, but also in learning theory and methodology. The intensive consideration of basic courses naturally led to a wider concern for the study and revision of the total curriculum. That study is underway now. It too will have implications for the further revision of the basic courses. The tenor of the concerns in new curriculum study and revision may be reflected in the following excerpt from a report to the faculty by the chairmen of the academic divisions of the College in the fall of 1965. The report itself followed the participation of the Division Chairmen in a three-week workshop sponsored by the Danforth Foundation in the summer of 1965 in which they centered their study on matters of curriculum.

> What we are proposing as an approach to curriculum review--not original with us--is supported by the best that is known about how people learn and about how various kinds of instruction affect them. For many it will result in a complete reorganization not only of course materials, but of pedogogical approaches.
>
> For instance, materials selected for courses should meet certain criteria. They should expose and make clear the foundations of structure, of concepts, and of principles upon which the discipline rests. They should be important in American culture, even in world culture. They should possess the potential for involving the student in the activities of the discipline. They should assist the student in inducting him into the processes, style of work and methodologies characteristic of the discipline. They must be teachable.

The statement above implies that another period of reexamination and revision of basic courses at Stephens College and elsewhere would be profitable, even necessary, if the curriculum is to keep abreast with the newest trends in instruction. Much is being currently published on curricular developments based on most recent learning theory. The reorganization of goals and of the substantive content of at least basic instruction around fundamental concepts and principles of a discipline, with emphasis upon the processes of inquiry and discovery in that discipline, today seems more and more imperative. The organization of goals and subject matter around factual knowledge only is no longer sufficient. Both the rapid obsolescence of information and the "knowledge explosion" itself suggest the need of new approaches more useful to the layman.

Even though this report presents a most recent major effort of curriculum revision, Stephens College is already beginning another search for significant improvements not only in its basic course structure, but also in its entire curriculum. In doing so it will try to be cognizant of what other experimental colleges are doing and to cooperate in joint efforts when these are feasible and promising. To assist its own staff and others who may find it useful, a brief bibliography of significant source materials is included in the appendix. All are relevant to new directions in learning theory and curriculum revision.

GENERAL HUMANITIES

A Report on the Development of the Basic Course In the Department of Humanities at Stephens College

1959 - 1965

by

Dr. Alfred M. Sterling

1. WHAT MAKES THE COURSE BASIC?

Everyone makes judgments in the arts. That is the reason for the consideration of the General Humanities course as basic. In this course the five major arts of music, literature, painting, sculpture, architecture, and combined arts such as opera, drama and dance are studied. Direct experience with the arts through cultural programs, concerts, plays, exhibits, records, slides, and films forms the basis for lectures and discussions in the class room. Increased understanding and enjoyment of the arts are the primary objectives of the course.

General Humanities makes no pretense of training performers in music, drama, or dance. Other courses in the Division of the Arts do that. General Humanities does try to produce a more sensitive audience for the performing arts. It often does serve the purpose of introducing the student to a field in which she finds herself so interested that she decides to go on with it for professional purposes. For this reason the course is recommended by advisers to prospective Bachelor of Fine Arts candidates. General Humanities students also are encouraged to take subsequent courses in the history of the major arts as well as to develop their creative talents with more specialized training in the applied arts.

The aims of this basic course have not changed during the period of 1959-1965. They are fourfold: 1) to increase the number of arts the student enjoys and understands; 2) to develop the realization that there are certain basic principles common to all arts; 3) to formulate judgments of what comprises a valid artistic expression; and 4) to continue application of what has been learned. In short, General Humanities is a basic course in applied aesthetics for the student who wants to know not only what she likes but why she likes it.

2. WHAT IS THE BASIC CONTENT OF THE COURSE?

The course which starts with student needs in mind is necessarily organized in a different manner from that which arranges the arts chronologically and exposes the student to history and the arts at the same time. If the arts are taken up one by one with a specialist in charge of music, one in charge of the visual arts, and one in charge of literature, the integration of the basic principles common to all arts often remains obscure. After many years of experimentation Dr. Louise Dudley evolved six simple questions which the student needs to answer when confronted by a work of art. They are 1) What is it about? 2) What is it for? 3) What is it made of? 4) How is it put together? 5) What is the style? and 6) What is my judgment of it? The answers to these questions on Subject, Function, Medium, Elements, Organization, Style and Judgment provide the framework of Dr. Dudley's text[1] and the basic contents of the General Humanities course. We have repeatedly reexamined the basic questions which we wish students to ask about the arts and we continue to believe that the questions posed in the Dudley-Faricy text make possible the simplest and most thorough approach for a course which purports to increase deeper understanding and enjoyment of the arts.

---

[1] Dudley, Louise and Faricy, Austin: The Humanities, McGraw-Hill, New York, 1960. (A revised edition by Louise Dudley is expected to be available in 1966.)

3. WHAT ARE THE PRINCIPAL METHODS OF INSTRUCTION?

Approximately seven hundred Humanities students or seventy per cent of the entering class meet with the same instructors three hours per week for two semesters and six hours credit in sections of about twenty-five students each. With ten instructors teaching the course, methods of instruction differ widely although objectives are the same. It is not necessary for every instructor to take up various principles in the same order or to use the same examples. There is always a search for ways of making both the choice of learning experience and the method of presentation more effective.

In addition to the text, the Humanities course uses considerable audio and visual material. Each classroom is equipped with facilities for reproducing slides, films, records, tapes and television programs. An extensive collection of sculpture and pictures (both reproductions and originals) enrich the teaching of the visual arts. Study aids such as listening rooms and various learning machines also are available for assignments. Whenever possible, we prefer the live art to the reproduction. Sometimes this means the instructor or the student who is especially gifted demonstrates principles, shows how a musical instrument works, performs a fugue, or paints an oil or water color. Sometimes it means architectural tours of nearby buildings or trips to the theatres and museums of St. Louis, Kansas City and New York during spring vacation. Cultural events of the College, however, provide the major portion of the student's experience with operas, concerts, plays, dance recitals and art exhibits.

4. HOW IS STUDENT ACHIEVEMENT EVALUATED?

Most instructors give short factual quizzes on text and reading assignments and usually longer examinations (part definition and identification and part principles and essay) on each of the six units of the course. Semester projects range from art, music, and literary criticism to original paintings, songs and poems.

We use three kinds of placement tests developed by the staff in workshop. The first is a general attitude test of the arts. The second is an objective factual test. The third is a subjective judgment test. In addition to the results of the Humanities placement test, the Reading and Writing scores from the English tests are used to discriminate between the slow and fast students, who are not segregated into special sections but individually stimulated to do extra projects or honors work. Another type of evaluation is used by some teachers who give a test in the first week of the course on vocabulary and analysis and then give the same test again in the last week of the course in order to evaluate the student's progress by the difference of her scores. These tests are constantly revised both in context and method of presentation.

5. WHAT EXPERIMENTATION HAS ACCOMPANIED THE COURSE DEVELOPMENT REPORTED HERE?

5.1 Humanities Closed-Circuit Television Programs - Four years ago the General Humanities Department with the help of the Television and Radio Department presented a weekly hour program over the closed television circuit to all Humanities students who were assembled in groups of twenty-five before television sets in the classrooms. The subjects of our programs included What is Art, Orpheus and Eurydice, Michelangelo's Sistine Ceiling, The Applied Arts, Instruments of the Orchestra, Elements of the Visual Arts, Elements of Melody and Rhythm, Elements of Sound and Sense in Literature, Composing a Song, Shakespeare's Othello and Verdi's Othello, Discussing a Novel, What is Comedy, What is Jazz, What is Tragedy, Vocal Forms, Dance Forms, Mozart's Marriage of Figaro, Modern Sculpture, Directing a Play, Modern Architecture, and Modern Dance. Hand-out sheets were used to supplement each program, and students' reactions were evaluated with questionaires and interviews by our Director of Research.

Good points about the television programs were close-up views of live experiences not possible elsewhere and utilization of special talents from other departments in the Division. The difficulties were chiefly scheduling enough time for adequate rehearsals and coordinating classroom instruction with TV instruction. Therefore, the following year we decided to reduce our programs to one a month, instead of one a week, repeating only our best programs. It also became apparent the professional films, some in color, did a better job than most of our weaker programs.

5.2 Films made at Stephens - In the last three years we have been able to convert some of our best TV programs into films with adequate time for preparation. We now have our own films of Orpheus and Euridyce, The Applied Arts, Modern Sculpture, Excerpts from The Marriage of Figaro and Amahl and the Night Visitors, Instruments of the Orchestra (Incomplete), and The Elements of the Arts (in color). We hope to make more in the future. At present each Humanities instructor can more flexibly coordinate his classroom instruction with our 'home-made' films as well as with our fine collection of professional films some of which we rent and some of which we own.

5.3 Cross-departmental student projects - An outgrowth of our Humanities Awards has been the Louise Dudley Criticism Award which recognizes outstanding criticism in art, music, or literature. Graduation with Honors in Humanities is granted a student who has maintained a three point average in her courses, submitted written evidence of her project in the field of Humanities, and passed an oral examination. Honors projects provide for individualization of instruction for the able students and stresses the integration of subject matter across departmental lines.

In the past, Humanities students have been encouraged to supplement their regular assignments with the making of wood-blocks or water colors in the Art Department or attending rehearsals in the Music Department and Drama Department or attending special sessions offered by the Dance Department. Humanities students may sign up for a two week period in groups of twenty-five of at least six of ten possible hours from 5 to 6 P.M. to experiment with art media under the supervision of a faculty trained student instructor. Students are asked to pay one dollar laboratory fee. Those who are interested in trying out work in applied arts without taking a course for credit have a chance to do so and the student instructor gains valuable teaching experience.

5.4 Field Trips - The department has consistently sponsored one-day trips to St. Louis and Kansas City and six-day visits to New York during spring vacation in order for students to visit museums, take architectural tours, and attend operas, plays, concerts and ballet performances. We are expanding this by some divisional planning in the case of spring trips to New York and are trying to make the trip less social and more educational. We are also considering expansion by adding a summer tour for credit to New York as well as a semester for credit abroad.

5.5 Automated slides and taped commentaries - Over the years the department has built up a sizable collection of tapes that are used for large groups in listening hours or for individual students at listening stations in the library. These tapes range from self tests in music and literature to television programs.

In a recent summer workshop ten units on the visual arts using automated slides with taped commentaries were prepared for the selectro-slide machine. This machine is equipped with earphones so that the series can be heard and seen in the library continuously at half-hour intervals thus providing assignments for a sizable group of Humanities students. The units also can be used for even larger groups in class rooms and auditoriums on an automatic 2 x 2 slide projector synchronized with a 7½ speed tape recorder. More units on architecture are in preparation.

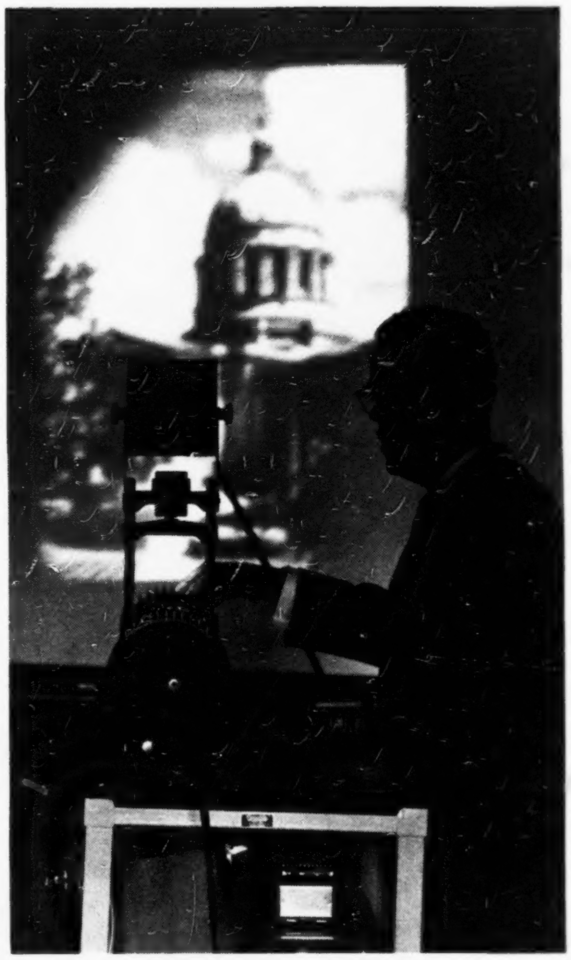
Another experiment in progress with tapes is the making of commentaries, preferably by the painter himself, that can be played back to the student studying the painting on exhibit.

5.6 Methods of Scheduling - For several years the Humanities staff has faced the problem of where and when to assemble all Humanities students at any one time. Although a cultural event which is scheduled in the evening and is required as a class assignment is in fact a large group meeting, there is no longer an hour in the day when all Humanities students can be required to meet together. If a film or record is to be assigned outside the classroom, it must be scheduled on a two-day hourly basis in order for the majority of students to attend. This is one of the reasons a workshop was held last summer in order to study the most effective and efficient method of scheduling Humanities classes and assignments in our new quarters.

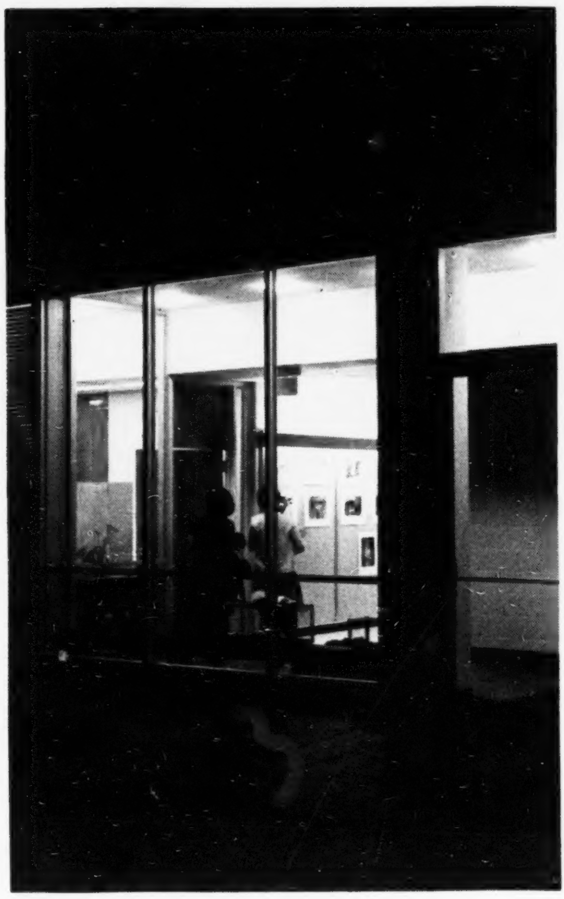
One solution to the problem is the Stephens House Plan in which approximately one hundred Humanities students can meet with their Humanities instructor in one group at least three times per week if necessary. Another solution, now in a third year of trial, is for approximately one hundred students to meet with their instructor twice a week for lectures and demonstrations with a third meeting in the week scheduled in small groups for discussion with their instructor.

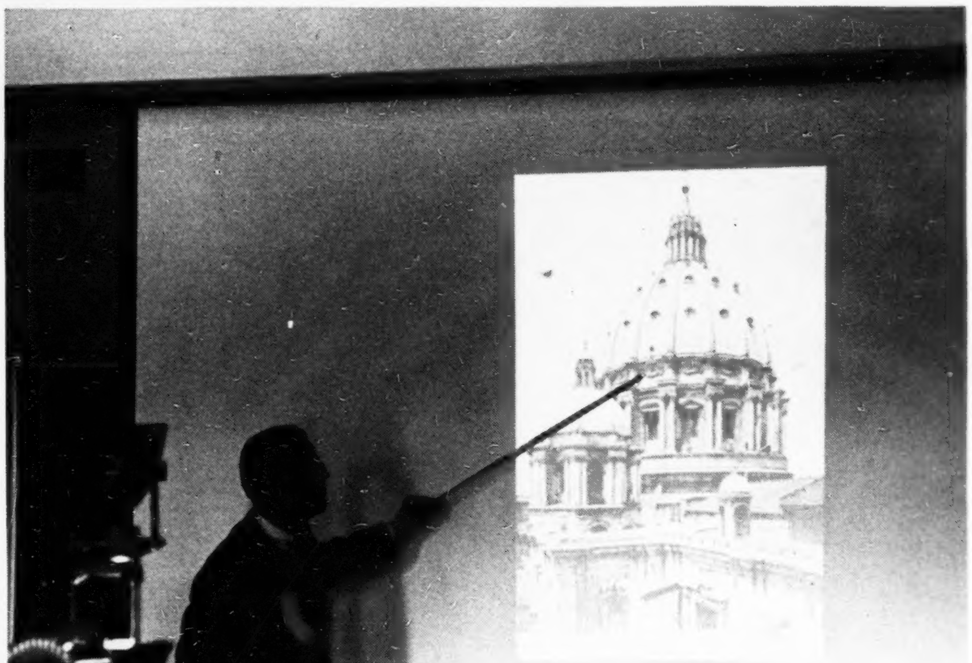
5.7 Evaluation Procedures in Progress - We are generally concerned not only with promoting more challenging work for the superior students, but also with changing the level of the course to meet the new needs of Bachelor of Arts and Bachelor of Fine Arts candidates. Although we consciously aim the course at the top ten per cent, there is a limit to which we can challenge the advanced student with special and extra work. Besides, more and more high schools are offering General Humanities courses to their seniors. For this reason we propose to reactivate the department's course in Advanced Humanities.

5.8 Teaching Personnel - A representative from each department of the Arts Division, except Fashion and Dance, has taught at least one section of Humanities during the past few years. This produces good departmental integration and valuable exchange of ideas in our bi-weekly staff meetings. The instructor from another department is able to contribute the specialist's information and viewpoint, and he is able to make clear to his own department what we are trying to do in General Humanities. On the other hand, it is not always possible to secure the instructor from another department who has the training in art, music and literature necessary to teach the basic course, and it would be unfortunate if the position were just an administrative convenience for spreading the teaching load. The Humanities course needs to be protected from the instructor whose specialty prevents him from giving full time allegiance to the teaching of all the arts.



Humanities offers opportunities for varied studies through audio-visual means, museum visits, and departmental exhibits.





6. WHAT ARE THE NEW DIRECTIONS OF THE COURSE AND THOSE THAT NEED FURTHER STUDY AND EVALUATION?

6.1 Audio Visual Aids - Because of greater ease of utilization we prefer films and slides to closed-circuit television programs. We are increasing our examples from the mass media of the combined arts, such as films, because of their growing relevance to education in society today, but we intend to use them as a supplement to instead of a substitute for classroom instruction.

6.2 Field Trips and Seminars Abroad - Because of the educational advantages of studying live visual arts as opposed to reproductions, we are considering a summer tour for credit to New York with side trips to Washington, as well as a summer seminar in Italy where the visual arts of the Italian Renaissance will be the focus of attention.

6.3 Adult Education Programs in the Humanities - Our Humanities Adult Education Series of Ten Units prepared by members of the Humanities Department in 1954 and revised in 1960 have been used so far primarily by Stephens Alumnae. This material should be made available for mass distribution, for example, in summer resorts where larger sessions might be directed by members of the Humanities staff.

6.4 Advanced Humanities - For the students who plan to go on for a Bachelor of Arts with a concentration of courses in the Humanities area, for the students who have had General Humanities in high school, and for the students who ultimately hope to meet the growing demand for Humanities teachers, we propose to offer again three hours credit each semester of Advanced Humanities. When this course was last offered in 1958-59, its catalogue description read: "A continuation of General Humanities. The approach to the arts through their common structural principles is further examined and developed, and opportunity for practice in analyses of great works of art is offered both in group and in individual conferences. Three hours a week throughout the year."

6.5 Campus Cultural Events - Arrangements should continue for visiting artists and members of other departments in the division to address Humanities students in conjunction with important campus cultural events. For example, the Stephens Symphony Orchestra has demonstrated the instruments of the orchestra and the duties of a conductor. Miss Celeste Holm when performing on campus, talked to the students and Dr. C. M. Davidson prepared students for a Playhouse production of Shaw's Candida previous to its showing.

6.6 Departmental Correlation - We are considering the expansion of voluntary media projects to include drama, music, and dance. Possibly third year Bachelor of Fine Arts students could be recruited to supervise projects in each of the performing arts thereby gaining valuable in-service teaching experience.

6.7 Revision of the Humanities Text - Each of us intends to continue to meet with Dr. Dudley in order to make suggestions for the revision of the text.

6.8 Reexamining Our Objectives in Light of Student Needs - In trying to make our evaluation materials match our objectives, we need to study more carefully the results of our fourth objective. How well do our students apply what they have learned in the General Humanities course after they leave Stephens? We need to ask more often Dr. Charter's favorite question, "What do we expect our students to remember when they have forgotten what we taught them?" Questionaires have been sent to alumnae and a few experimental taped interviews have been made with former Humanities students in their homes.

More of this needs to be done. Over the years students have told us what they found valuable and what they found obscure or practically useless. Out of much of this information the General Humanities course has grown and changed.

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CONTEMPORARY SOCIAL ISSUES

A Report on the Development of the Basic Course in The Division of Social Science at Stephens College

1959 - 1965

by

Dr. Gene F. Schmidtlein and Dr. John A. Decker

1. WHAT MAKES THE COURSE BASIC?

1.1 In the Contemporary Social Issues course we try to give our students a balanced and integrated view of the social science disciplines so that they can develop a more objective and knowledgeable understanding of modern life. In teaching this course we acquaint the student with the methodology of the disciplines in the Division of Social Science, particularly sociology, anthropology, political science, economics, psychology and history. After a brief introduction to the principles and methods, the student is then asked to use these tools in analyzing such issues as race, crime and delinquency, population, poverty, alcoholism, education and foreign policy. In recent decades the social sciences have become so highly specialized that we consider it very worthwhile to attempt some integration or overall view as the college freshman enters the field. By causing the student to apply the principles and methods to very current problems, it is hoped that the student will pursue the disciplines for greater expertise. The student also sees that most problems are not just sociological but cut across all the areas. For example, race involves social, political, economic and psychological understanding. Since students come from all parts of the country and world, we have a real cross section of opinion in the classroom.

Discussing controversial problems, we discover immediately that different people propose different solutions for these problems. In this way we are introducing to our students a laboratory experiment in the democratic process. We hope that by studying controversial materials they will learn to investigate them carefully, draw up intelligent conclusions and at least learn to study them calmly.

1.2 A second aim of this course is to broaden the social sympathies of our students. Many of our students know very little about economic, social or racial groups other than the one in which they grew up. We try to introduce them to the problems of these groups and hope that by the end of the course we have broadened their social sympathies.

1.3 A third aim of the course is to broaden their world outlook. Today America has assumed heavy burdens in international affairs and American voters must pass judgment on American policies with regard to world problems. We are trying to give our students the ability to make good judgments.

2. WHAT IS THE BASIC CONTENT OF THE COURSE?

2.1 The outline of the Contemporary Social Issues course is contained in a syllabus written by our staff. In this syllabus we have outlined eight important problems and in connection with each outline we give in the syllabus a description of the main aspects of the problem, the assignments which each student is supposed to read and a long bibliography of current books on the subject which could be used for references. The units discussed include:

Unit I - Social Change in an Industrial World

Unit II - Democracy and the "Isms" with which Democracy Competes

Unit III - The Politics of American Democracy

Unit IV - Social and Personal Maladjustment

Unit V - Racial and Cultural Minorities

Unit VI - The American Economic System

Unit VII - The United States in World Affairs

Unit VIII - Living in the Mass Society

This list of units represents the best judgment of our staff on the problems that our students should face. The list this year is a little different than it was in the syllabus written two years ago. At that time we included a unit on marriage and the family and we included a part of a unit on consumer problems. Since these problems are discussed in other basic courses on the campus we have eliminated them this year. This gives us a little more time to give to each of the eight main units.

2.2 A major change in the course for 1964-65 and 1965-66 is the addition of an important paperback book or two in each of the eight units. The list of paperbacks which all students taking the course buy and read includes:

1964-65

Reusch, TOP OF THE WORLD
De Tocqueville, DEMOCRACY IN AMERICA
White, THE MAKING OF A PRESIDENT
Burkhart and Lee, GUIDE TO AMERICAN GOVERNMENT
Salisbury, THE SHOOK-UP GENERATION
Handlin, RACE AND NATIONALITY IN AMERICAN LIFE
Heilbroner, THE MAKING OF AN ECONOMIC SOCIETY
Report of the President's Commission on National Goals: GOALS FOR AMERICANS

1965-66

Reusch, TOP OF THE WORLD
Kluckhohn, MIRROR FOR MAN
Ebenstein, TODAY'S ISMS (4th Ed.)
Rossiter, THE AMERICAN PRESIDENCY
White, THE MAKING OF THE PRESIDENT 1960
Heilbroner, THE MAKING OF AN ECONOMIC SOCIETY
Harrington, THE OTHER AMERICA

3. WHAT ARE THE PRINCIPAL METHODS OF INSTRUCTION?

3.1 All teachers in the Social Studies Department help teach and help plan this course. The same teacher in his or her section leads the students through all the problems of the course, whether that teacher is an expert in the given problem or not. We feel continuity of teachers is more important than specialization in subject matter. We also feel that studying all of these problems through the same teacher helps the student to integrate the course.

3.2 The course is taught in a variety of teaching situations. Four sections of this course are taught in the Searcy Hall House Plan, where very flexible schedules are possible and where deviations from regular routines can be used. Three sections of the course are taught in a three-teacher teaching team, the three teachers representing three different social studies disciplines. The rest of the sections of the course are taught by single teachers. Occasionally, one of the staff who is an expert in one of the fields helps the teacher out and talks for a class period about a given problem in someone else's classroom.

3.3 We make heavy use of class discussion in this course. This is especially important for our students because our girls come from every state in the Union and represent every regional point of view in this country. We feel that it is a very valuable experience for a girl, for example, from Duluth to sit next to a girl from Mississippi while discussing a controversial problem such as race.

3.4 We have introduced one self-study project in the course recently in connection with Unit III on the Politics of Democracy. We have a guide written by Mr. Burkhart and Mr. Lee. In this guide is a list of questions and answers, discussion questions, controversial quotations and that sort of thing. The student can use these excercises as a guide for study. After the student has finished the exercises, a key to this guide is provided in order that the student may check her own work and discover her weaknesses without the teacher's assistance.

3.5 We feel that field trips are very important for our students in this course, because many of them know very little about the institutions which we are discussing in this course. We have several field trips which we think help to fill this gap. Here in Columbia, for example, we have just completed a very large slum clearance project. One of our field trips takes the students in a chartered city bus to tour this area at the hour when the class normally meets. We try to give them a chance to talk with people who live in the area and with people who helped plan the clearance project.

Another project is a labor relations trip to the Ford plant in Kansas City where they have a chance to go down the line of production and then spend time in the morning discussing the problems of management with officers in management. In the afternoon, a discussion with labor leaders is planned.

Another trip is one to the Intermediate Reformatory at Algoa or the woman's prison at Tipton which gives our girls a chance to talk with the personnel at these institutions and see conditions within the institution.

Another valuable field trip is one to the State Mental Hospital at Fulton where the staff of this institution have been very cooperative. They let us go through the institution under their supervision and as a result many of our girls have volunteered to do social service work in this institution with our Burrall Community Service project.

3.6 Two years ago we edited a whole series of tape recorded interviews, some of them taken from amplified telephone interviews, some taken with speakers on the Foreign Relations Lecture Series. There are tapes that fit in with each of the units of the course. We have set up a listening laboratory for the students' individual use of these tapes. Also we have an arrangement to play the tapes in the classrooms.

We expect students enrolled in this course to attend the Foreign Relations Lecture Series on international affairs which gives them a chance to hear important authorities in the field of international relations.

3.7 A committee of the staff each year selects a list of movies which we feel the students ought to see in connection with each unit of the course. These movies can be shown in the classroom. They are also put on closed circuit television at three different times during the week and can be seen by the students during leisure time in a lounge.

3.8 We ask our students to read the textbook for the course which is currently Hunt, SOCIAL SCIENCE. This is a popular and nationally used textbook for courses of this sort. In addition they are expected to read our own outlines for each unit in the course syllabus and, of course, the paperbacks mentioned above.

4. HOW IS STUDENT ACHIEVEMENT EVALUATED?

4.1 Each teacher is responsible for building his own tests for each unit of the course.

4.2 At the end of the semester, the department gives a departmental examination for the work covered during the whole semester. The departmental semester examination is worked out on a cooperative basis, each member of the staff contributing a certain number of questions on a particular unit.

4.3 More attention must be given to effective testing to measure how adequately the students have grasped and applied the methods and principles.

4.4 We ought to have a fund which would make it possible for us to bring

Social Science classes use amplified telephone conversations with noted authorities to broaden range of studies.

Visiting lecturer in Foreign Relations Pauline Frederick, NBC correspondent to United Nations, holds informal discussions with students.

to campus important leaders in various controversial fields. We do have an excellent lecture series on international affairs, but we need to expose our students to some of our leaders of domestic problems.

4.5 If we carry out point 4, we would need to make schedule changes so that it would be possible to get the 300 students enrolled in this course together at a particular hour. This would also be important for us in the ordinary teaching of the course if we had a time when we could occasionally get all the students together for a general discussion of some of the problems.

4.6 In keeping with 4.1 above, particularly, we need to launch a vigorous new effort to reorganize the curriculum in the social studies for which Contemporary Social Issues is the basic course. Perhaps exploration of the so-called "spiral curriculum" would offer promising suggestions.

5. WHAT EXPERIMENTATION HAS ACCOMPANIED THE COURSE DEVELOPMENT REPORTED HERE?

5.1 For 35 years we have experimented in the building of this course, Contemporary Social Issues. Over the years, about two years apart, we have had a summer workshop at which time the entire teaching staff discusses the problems of the course, the weak points in it, changes they would like to have made and then the entire syllabus is rewritten. The reading lists and bibliographies for each unit are revised. That has been a standard procedure for us over the years.

In the summer of 1963 we held a staff workshop in which the old syllabus was very carefully rewritten after serious discussion of the problems we wanted to cover.

Before we could determine what should go into this syllabus, we tried to make a careful examination of the kinds of materials taught in high schools. We have come to the conclusion that a relatively small percentage of our entering students have had a problems course in the democracy field.

In the 1963 revision of the syllabus we eliminated some parts of the old syllabus and eliminated some of the problems that we had formerly discussed. We no longer have in our present syllabus the unit on marriage and the family because we feel that the Home and Community Division has an excellent course in that field. We have also left out part of a unit which formerly was devoted to consumer problems but we feel this is covered by a course in the Home and Community Division. The most dramatic change in the organization of our course was the addition of paperbacks for each unit which the students buy and read. We felt that it was more important to have them read a well known book in this field rather than read chapters or parts of other textbooks. This project has seemingly been very popular in the course so far and the students feel considerable satisfaction in having read a well known book in each of these fields.

I have already discussed the fact that we added a self-study technique in connection with the unit on politics by using the very interesting Guide to American Government by Mr. Burkhart and Dr. Lee. I have also mentioned our listening laboratory which was set up four years ago to enable our students to listen to taped interviews with many specialists in this field. Many of these tapes are very important as far as giving a student a chance to hear what a well known person has said on this particular problem.

6. WHAT ARE THE NEW DIRECTIONS OF THE COURSE AND THOSE THAT NEED FURTHER STUDY AND DEVELOPMENT?

6.1 More planning should be given to the teaching of social science methodology in each discipline. The more effectively and excitingly this can be done will determine the success of the course. Applying fundamental methods and principles to thoughtful problems should give the student the ability to analyze and deal with sociological problems as a layman.

6.2 Constant attention must be given to our supplementary paperbacks to make sure we have the most suitable material for our course.

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ENGLISH

A Report on the Development of the Basic Course
In the Department of English at Stephens College

1959 - 1965

by

Charles F. Madden

1. WHAT MAKES THE COURSE BASIC?

In a pseudo-science, dianetics, which was popular a number of years ago, patients in a nearly hypnotic state were reportedly able to regress psychologically to the moment of their physical conception. In the terminology of dianetics this point was called "basic-basic". Borrowing the terminology without fully embracing the theories, the English 101-102 course could be called the "basic-basic" course. All that exists in the understanding of man is rooted in communication. It is a peculiar function of the human mind which creates language and it is language which creates community among men. As our syllabus at one point in the development of the course said, "Since each man's life consists of experience, meaning and passion and since no man can enter directly into the life of another, we look upon language as the only means which enables men to participate symbolically in the experience, meaning and passion of each other. It is this symbolic participation which we designate community among men."

This concept of human communication generates both the breadth of our concern and the fundamental purpose of our instruction. Every effort of one human being to reach from his mind into the mind of another is technically within the scope of the course and anything which impedes this process or which makes it more effective is subject to consideration. Although a course based upon the concept of communication might direct attention to the whole symbolic process, the major concern of the Stephens College course is the effective use of language. When the student has completed the course she should be not only a more competent technician but a more human human being. She should be able as reader or listener to apply analytical principles which will distinguish the logical from the illogical, truth from deception, genuine emotion from sentimentality, and the artistic from the mundane. As writer or speaker she should become aware of these distinctions to such a degree that she will only use language in ways consistent with what she knows to be the highest level of integrity.

The shift from a technique directed course (an over-generalized summary of the course from 1945-1959, then titled "Communication") to a course more philosophically based was begun before 1959 under the direction of Ralph C. Leyden, former chairman of the department. However, in 1960-61 Mr. Leyden appointed a committee to study the aims of the course and to make recommendations. Mr. Leyden presented to the committee a list of some fundamental considerations to be used in revising the course. They were as follows:

1. Through its content, organization and instruction, the course should help a student acquire the knowledge and skills in communication which are commonly needed by responsible, educated adults.
2. Communication, for the purposes of this course, is defined as the process of sharing knowledge, ideas and feelings, primarily through language, employing as the occasion demands, the activities of reading, listening, writing and speaking.
3. Organization and instruction should provide for as much individualization as possible.

4. Instruction should begin as nearly as possible at the point where the student is in her understanding of and competence in communication.
5. The course should provide evaluation of the level of the student's knowledge and understanding of the communication process and of her ability as a communicator in reading, writing, speaking and listening activities.
6. As one of the "set" of integrated courses comprising the basic general education program at Stephens, the English course should take cognizance of the demands upon the student's ability in communication in her study in the other courses in the set.
7. It is, in turn, appropriate to expect that teachers of the other courses in the set will show a similar concern that students be responsible and effective in their communication in those courses.

This committee, continuing its work in the summer workshop of 1961, made the recommendations which resulted in the present organization of the course and issued to the staff a description of the course to be followed in the academic year 1961-62. Subsequent considerations have resulted in a more sophisticated treatment of the process of communication and a refinement of methods and materials rather than in a redefinition of aims.

2. WHAT IS THE BASIC CONTENT OF THE COURSE?

The English 101-102 course examines those functions of mind--inquiry, judgment, and the representation of passion--which establish community among men. These units are briefly described in the following paragraphs.

The Nature of Language

The premise of this unit is that the study of language helps the student to realize her humanity. Language, we say, makes us conscious. Without its varieties, we would amount to mere numbers. Consequently, we study its nature to study ours: man makes his speech; it makes him man, the social being. For civilization rises from agreement, understanding. Thus, the theories of the origins of language show it as a continuity; the difference between symbol and sign stresses the distance between man and animal (when Helen Keller realized the symbol WATER means water, she became human). The point that language is communion (that understanding depends upon both of us) should awaken the student to the dangers of vague expression, unwitting ambiguity, careless structures. We hope she emerges able to use language honestly, clearly, specifically--to say something, rather than to fill space with words.

In this unit, the instructor presents the standards of our language as necessities of clarity: grammar, syntax, spelling, diction. These technical matters, however, serve: the student must dominate them. Although we review their presences, and inspect their positions continually during the year, we give the weight of our efforts to what we can teach and learn: ideas (their existence, that is), and structure. Through language, we agree, one can reach an idea. Through organization, he can reveal his finding (his thesis) and defend it (his evidence).

The Principles of Inquiry

Thesis and evidence bring us to inquiry, or, inquiry leads to evidence and thesis. Here, we investigate thought as distinct from idle reverie. We want the student to realize, again, what makes us human: knowledge, through language. As always, the difficulty of distinguishing between capricious conclusions and tested ones hampers thought: rather than using reliable evidence to arrive at valid assertions, the student often "expresses herself," daydreaming on paper (perhaps an interesting occupation, depending on the talent, but not within the scope of this course). Inquiry, then, assumes (and we teach the assumption) deductive laws and inductive processes--that there is a method for rising from madness (unwarranted emotion), that we can understand and use the method. Inquiry means we begin with a problem, find the good instances, weigh them, make our conclusion (the thesis), test it deductively, and present it logically rather than dramatically.

In this unit, instructors present the techniques of deduction and induction essential to thought: the syllogism and its formality; fallacies and their pitfalls; hypotheses and generalizations and their orders. Among the ways these matters appear, writing holds prominence: the composition represents the result of the inquiry.

The Principles of Judgment

Proceeding from inquiry, we carry on the battle for impersonal expression, impersonal in the sense that one reaches his conclusions, or theses, logically. One means to persuade, but with concrete evidence, not with noisy prejudices. In the study of judgment, we must again try to make the student aware of distinctions: "I like it" demands no evidence, no weighing, sifting, testing. One must recognize such "judgments" as matters of taste, personal or even public (the couturier lives on changing opinion). Language reflects our definitions of good, bad, beautiful, ugly; because we agree upon such definitions, we live together. These judgments, then, we inherit and develop; they lie outside the inevitability of logic. We inquire to discover; the worth of our discovery ranks high or low among men, as we achieve consensus.

This unit provides a nice transition to the next, the Representation of Passion. Some instructors devote time to the techniques of persuading one of his judgment: why he believes his opinion is better than another. Some instructors use judgment as part of inquiry (as a distinction between conclusion and opinion), or as part of the next unit (why critics believe one poem is better than another, for example). Whatever the procedure, we want to stress the difference between "I like" and what is.

The Representation of Passion

Love, hate, jealousy, greed, pity, fear, hope, exaltation, melancholy--the passions leave the control of logic, that firm order of detachment. But language puts shape to the apparent chaos of our natures: inquiry and judgment for thought; the arts for feeling. The two systems overlap--we emphasize that point--but they differ in intention: where logic means to tell us, art aims to show us. In both, our approach is not aesthetic or moral or political or epicurean, but, again, rousing: we want the student to realize that literature is language. The artist is artist not because he is philosopher or preacher, but because he composes: he takes formless love, hate, jealousy, greed--shapes them and stands them before us--in the strongest and most visible posture he can construct. And he does not talk about what he has done; he has done it. We talk about it. We look at it logically: we investigate, in order to see it better, to find out what makes it and others like it visible and strong. We say, "What does it mean?" and we mean what does it say, what does it show us of reality (an impossible term--consequently, the artist is our best attempt at defining it.) Above all else, we assume that the artist intends that we see the world through his eyes: images of ourselves, our universal passions. He is not writing a personal diary; he is showing us mankind.

Knowing that members of the staff prefer to choose the literary works for study from their own favorites the department recommends only that each student read from each of the following categories: short story, novel, drama and poetry. In this unit the most common approach focuses on the work rather than biographical or historical information or aesthetic theory. In a consideration of the work the relation between structure and intention is emphasized and most of the writing assigned grows out of this concern.

The English 101-102 course has as required material for all students an authorized dictionary, one of three recommended for them and A Guide to the Stephens Library. In the year 1965-66 all students used the textbook The Plain Rhetoric by Rubenstein and Weaver, published by Allyn and Beacon in 1964. The course follows a program of instruction which is divided into the four basic units. These units are begun following perhaps a week to two weeks of introduction on the particular approach used by the College. During the introductory section of the course some effort is made to have the students grasp the concept of communication which I have described in Section 1 of this report. This is done by the assignment of an essay written by Andrew Jolly of the English Department and the expectation that students will view a televised program prepared by Jack LaZebnik of the English Department and presented at the end of the first week of classes. The title of Mr. Jolly's essay is "The Nature of Communication" and Mr. LaZebnik's presentation is called "The Nature of the Course". There are also some recommended readings by various persons whose essays appear in our Readings for English 101 and 102, a mimeographed volume of essays on language which we keep on reserve in the library.

After the student has learned something about our concept of communication we begin a unit on The Nature of Language. This unit is well described in the paragraph which precedes the listing of books in the teacher's syllabus.

The effort in this unit is to present the functioning of language as part of a symbolic process. Instructors may approach this from various directions. Some of the instructors use the historical approach. They trace the development of languages starting with theories of the emergence of language and coming into some discussion of the dividing languages, the family trees of languages, and so on. Others use a semantic approach in discussing this unit and give attention to the theories and ideas of such people as Hayakawa or Korzybski and in this way make students aware of language. Still others will use the device of making students aware of levels of language by having them explore their own language and the language of those about them.

We try to point out that language, although it can be an effective tool for communication, can also, by its very nature, create confusion rather than clarity. People talking to each other or a writer writing must constantly be aware of the effect that his language is having on those who receive it. We also point out that as a receiver we must be aware of the purposes and intent of the writer or speaker and make efforts to have the communication as clear and direct as possible. In this particular unit of the course a number of themes are written by the classes. Ordinarily we have a theme on language. It may be an analysis of a limited language, the college language, or the jargon of a profession; or it may be an imitation of a writer. For this final assignment we try to have the student see that imitation requires careful study and that the careful study of a writer's language will tell much about that writer and his background and training.

The second unit grows rather naturally out of the first. The unit is known as The Principles of Inquiry and each student has before her a paragraph description of what we mean by inquiry, the effort of the individual to determine the nature of what exists in the present or what has existed in the past or any of the various context of inquiry. We point out here what thinking is; we make a distinction between fact and opinion. Most of us at this point in the course give considerable attention to the development of logical thought. We vary in the amount of attention given to terminology but a number of the staff at this point present a short course in informal logic. All of this, all the procedures of inquiry (here we include such things as definition, classification, induction, deduction) are seen as efforts of man to find out something about the nature of what exists. This, we trust, helps the student in the preparation of investigative papers. The investigative papers follow a number of smaller papers which may be extended definitions or papers demonstrating some of the processes of logical thought. We have abandoned the long investigative paper. Ordinarily we try to limit the students in their subjects, keep them to 1,000 to 1,500 words, and ask that they use the principles of documentation throughout the course.

As a transition from this unit to the next, The Principles of Judgment, we ordinarily say something like, "Once we have investigated in an objective and factual way, it sometimes becomes necessary for us to decide between apparently equal alternatives; to make a judgment." It is at this point that Unit Three begins.

The title of Unit Three is The Principles of Judgment. Judgment, we say, is the assertion of the worth of what exists and you make make a judgment on almost anything. The work on judgment is handled in various ways by various members of the staff. Most of the staff members, however, begin here to use the works of literature as the base on which to found the principles of judgment. This may not be true in every case. Some teachers have students write argumentative papers on many topics.

The analysis and judgment of literary material does, however, create an understandable transition to the fourth unit of the course The Representation of Passion. In this final unit of the course, where we define passion as any strong feeling, emotion or suffering, we use literature as the base for our discussion and for our writing. It is expected in the course that each teacher will use a volume of short stories from which a selection will be made, a novel, a volume of poetry from which selection will be made, and a play. Ordinarily, these are in paperback editions and are not a part of the regular text in the course. The faculty members are free to choose any work which they feel will effectively demonstrate to the students that the language of literature is a part of the communication process. We use literature in a particular and individual way: not as a work deserving appreciation (though this may result) but rather as a vehicle for the communication of human passion. The papers in this unit cover such things as: an analysis of character, the analysis of a single facet of a work, an analysis of the language, or an investigation of the intention of the work, a recognition of the thesis or the theme, or papers of comparison. There are many possibilities as we discuss this final subject in the first year English course.

In summary, the principle used in choosing this particular outline of the course was the belief that the human mind has a number of functions and that among the important functions are inquiry, judgment and the representation of passion. Since language is the tool used by man for the communication of these functions of his mind, we felt that an introductory unit on the nature of language was crucial and necessary.

There are other functions of mind which might be analyzed and isolated, but it seemed clear that the above named were also related the the student's current activity and that in other courses she would be called upon to exercise her mind in these particular ways. The course also takes cognizance of the fact, and I think it is reflected in the description of the content, that the activities of communication are inter-related and that by the study of these particular processes and principles we can see the interrelationship instead of studying the activities as isolated acts.

The major change in the content of the course during this period of development has been the move away from an activity centered course to a course in which the processes of communication are set in a framework which shows the relationship of the activities. During an earlier period we had in the course the study of newspapers, the reading of certain kinds of expository material, the reading of directions and explanations, the reading of textbooks. Now we have shifted to the point where we try to have the student see that reading is reading, that she must learn to read different kinds of material at different speeds, but in each case she is concerned with the intent and purposes of the author.

3. WHAT ARE THE PRINCIPAL METHODS OF INSTRUCTION?

Levels of Instruction. Instruction in the first year English course is offered to heterogeneous groups. A few students, those who place in (approximately) the upper 10% of the students on the SAT verbal and in the upper ranges by high school grade point in English, are exempted from English 101-102.

Experimentally, the department has worked with a program requiring these students to register for advanced courses in English, literature or speech. If the student successfully completes this "proviso" course she is granted six hours of credit for English 101-102 in addition to the credit she has earned in the advanced course. This program is administered by a committee of faculty members from the English department.

In addition to the basic course the department offers several non-credit developmental courses for those students whose deficiencies require particular attention. Such services are offered in writing, reading, spelling and speech. These are under the supervision of trained clinicians. Students are enrolled for zero hours of credit and expected to attend regularly and to complete all assigned work.

Methods of Instruction. Within each of the sections of the course the principal method used is an informal discussion. The teacher makes assignments and then discusses the material with the students, thus incorporating in the classroom itself certain principles of discussion. The class is directed by the teacher and yet the students are given the sense of participating in a worthwhile way in the class instruction itself. Although this is the principal method of instruction, there are a number of variations on this method.

The first variation on the discussion method would be, of course, a lecture method. This is a traditional method of operation and does have a validity which we understand and which we see related to an individual teacher's personality and effectiveness. With one instructor in the course, Mr. Jolly, there is such emphasis on lecturing that he asked permission several years ago and it was granted, to have larger sections than those ordinarily assigned. Since he does not try to carry on the kind of group discussion typical of the departmental pattern this makes sense for him. (In 1965-66 he is meeting all his students in one lecture section supplemented by several discussion and conference opportunities for small groups.

A second kind of instruction is a television lecture series which has been prepared each year by Jack LaZebnik of the English Department. These television lectures are aired over closed circuit television and are viewed by every student in the first year English course. The lectures have been arranged by the department with directions given to Mr. LaZebnik on the topics which would be most useful to staff members. There are ten lectures a year. These are presented on Saturdays at 9:00 and 11:00 a.m.--hours which are free for class meetings with every student enrolled in the course. The lectures have been beautifully prepared with strong visual support and with an excellence of idea that is typical of Mr. LaZebnik's work. The students view the lectures in classrooms across the campus. Ordinarily, these are supervised by the instructor and at the end of the lecture a standard listening test is administered to all students. The test is given to make sure that the students have understood the basic premise of the program and the importance of the related material used. This is an experiment that proved successful enough that in 1963-64 a program was begun of video-taping the programs to free us from the time element which bound us. The completed series is being used in 1965-66. The opportunity to use the taped programs gives us greater flexibility in time than was possible before.

Another method used within the department particularly is the tutorial. There is a tendency to divide the students into small workable groups of perhaps 6 to 12 students and work with them on a tutorial basis. Although most sections are scheduled with 20 - 22 students each teacher has considerable freedom in organizing his time and their activities. This method is particularly useful when concentrating on the principles of composition.

Another variation was incorporated into the English course in 1963-64: the team teaching approach. Mrs. Kathryn Hemry and Mr. Clifton Lines, the teachers assigned to a remedial level of work, planned a program which allowed them to share the 110 students assigned to certain sections. When the work was directed at the writing skills of the students, Mrs. Hemry conducted the classes. The experiment showed that such cooperative efforts had value for both the teachers and the students. Though we no longer have the remedial sections of English 101-102, cooperation between teachers of our regular sections is very much a part of the program. Mrs. Louise Rowe and Mrs. Bertrice Bartlett are this year combining certain of their classes for analysis of themes. Mrs. Bartlett, using the overhead projector, does the analysis for both sections. Later, in a portion of the course devoted to argumentation, Mrs. Rowe will supervise debate procedures as a part of the class instruction for both groups.

The teachers in the department are employing certain other devices, techniques and methods of instruction which ought to be reported. Mrs. Hemry is using programmed instruction in writing for her writing laboratory and Mr. Lines is using some programmed material in reading for his reading instruction. With the programmed material students are able to work at their own pace and to complete the work as rapidly or as slowly as seems necessary for the best learning.

Programmed learning is also being carried on in certain sections with material on logic. The programmed materials on logic have been prepared by Mr. Higgins of the English Department and Mr. Bates of the Philosophy Department. This is an effort to indicate something of the general overlapping of subject matter in these two Basic Courses and to permit students to get this information at their own pace and on their own time.

4. HOW IS STUDENT ACHIEVEMENT EVALUATED?

Determining the effectiveness of our instruction is a continuing effort on the part of the staff. Our major indication comes through the papers which

The program in English provides for conference teaching . . . and formal classroom lecture and discussion.

students write. Each of these grows out of reading or listening experiences. Our expectation for each semester is seventy five hundred words, which means that a teacher might actually assign a five hundred word theme for each of fourteen weeks of the semester. (It should be noted here that for a teacher with an average load of 120 students, this is 1,800,000 words of student writing to read each year!) The actual fact is, of course, that the assignments are spaced better than that with papers falling due approximately every two weeks and in some parts of the semester every three weeks. This allows the teacher time for grading; it allows the student time to work on her composition. Periodic testing is also used as a way of determining the level of knowledge which the student has gained. A program of post-testing throughout the department is being considered as a part of our instruction.

5. WHAT EXPERIMENTATION HAS ACCOMPANIED THE COURSE DEVELOPMENT?

Most of the experiment has been in terms of methods of instruction and these have been outlined in Number 3 above. The experimentation in the Stephens College House Plan of incorporating those students who would ordinarily be assigned to a laboratory or remedial level into regular sections raised questions relative to the three levels of instruction used at the beginning of this developmental period of the course, 1959-63. We have since moved to a point where all students are given a similar basic program with exemption for advance standing courses in high school or for exceptional performance on our placement tests. There are fewer and fewer students at the lower level (as the requirements for admission are raised) of ability. These students are being helped by some of the programmed learning processes. With these they work in their own time and at their own speed.

There has also been some concern with flexibility in terms of the number of meetings per week necessary and the size of sections. Mr. Jolly's experimentation with lecture sections has given us some indication of the value of this method and the television program of instruction has further supported our belief that there are occasions on which large groups can be instructed as well as small groups.

6. WHAT ARE THE NEW DIRECTIONS OF THE COURSE AND THOSE THAT NEED FURTHER STUDY AND DEVELOPMENT?

Although to the casual observer the course may appear to have moved in the direction of a traditional Freshman English course, the emphasis upon a sophisticated understanding and a developing competence in the process of communication constitutes a genuinely "new" development. Effort is directed primarily toward arousing the student's interest in the processes of his mind and "teaching him how to think." The effect of the communication "process" is not negated though we have moved away from the time when we had an academic quarter of speech, a quarter of writing, a quarter of listening, a quarter of reading. We have not lost sight of the fact that communication involves more than simply writing a freshman theme each week. The awareness of language as the basic tool in the symbolic process and the fact that language is used in many different situations under many different conditions underscore all of the instruction in our program.

We have moved away from the terminology of the Communication course and back into the traditional format of English 101 and 102. However, I do not think that we would want to move to a concern for logic and rhetoric only or to a concern for composition only. I do not believe this course should be a freshman literature program. All of these things (judging from the work of the students who come to us now) need to be a part of our instruction. On the other hand, I think it is perfectly clear that the instructional program in the basic course is heavy beyond all necessity and that part of this comes from the structure of the departments within the College rather than from the instruction in the course. I have begun conversations to consider some of the problems which constantly beset us: problems of load, of new personnel, of tenure, and so forth.

Perhaps the most urgent need is some method of evaluation at both ends, temporarily, of the course. We need more valid evidence early in the first semester to support our program of exemption and we need some general evaluation at the end of the course to determine the level of student accomplishment.

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BASIC BELIEFS IN HUMAN EXPERIENCE

A Report on the Development of the Basic Course in the Department of Religion and Philosophy at Stephens College

1959 - 1965

by

Dr. T. William Hall

1. WHAT MAKES THE COURSE BASIC?

The course "Basic Beliefs in Human Experience" can be called a basic General-Liberal Arts course in that it serves as an introductory course to philosophy and at the same time serves as a single and complete course for students who expect to do no further formal study in philosophy. It is basic, moreover, in that through lectures, readings, class discussion and all other resources, an attempt is made to help the student come to terms with the most fundamental and universal questions which all human beings face. It is the task of the course to aid students to be philosophical rather than to merely know the philosophy of others. Classical philosophical writings as well as contemporary essays in philosophy are used to aid the student in examining alternate ways of answering the questions which she inescapably faces as a human being.

Although behavioral changes in students are difficult to evaluate, it is certainly true that teachers in the course herein described expect that changes will take place. For example, it is believed that when a student enters into philosophical investigation, when a student sees that there are no easy or quick answers to any of the major problems which human beings face, and when the student discovers that there have been many alternative ways in which questions have been dealt with, there first develops a sense of frustration and hopelessness in the face of abiding questions. But as the student moves more and more into the process of her own philosophizing, she may well develop an ability to persist in asking questions which have no easy answers. It would be the hope that there would be an habitual development of examining ideas on their own merit without resorting to clique thinking, preconceived notions, or some type of "special pleading". It would be our hope that the student would gradually develop an ability to tolerate ambiguity or the lack of absoluteness in answers to questions in the recognition of human finitude. As the student becomes aware that all rational discourse must operate within a symbolic system, and a symbolic system is itself arbitrary, there is a possibility of improvement of human relations as she attempts, not so much to argue her fellow students out of a position, but to understand the symbolic system which the other student is using in the attempt to explain some problem or to develop a systematic way of looking at a variety of problems. The behavioral changes which are hoped for include the skill in critical thinking and suspended judgment until progressive clarity is reached, a growth in spontaneity and wonder at the mysteries of human existence, and it would be expected that the student would move toward meaning and motivation in her life as she gradually develops a number of intellectual patterns which integrate a host of experiences into some unified philosophy of life.

The course "Basic Beliefs in Human Experience" has markedly changed during the period of 1959 to 1965. In 1959, the course could be described as a somewhat traditional introduction to philosophy course. Although there was an attempt to begin each of the units in the course by an examination of some philosophical problem, the teaching methods and the materials used were those which would be common to any course where material was presented to help the student understand what the major ideas have been in any of the areas of human investigation. By 1965, focus has become much less on the understanding of classical problems in philosophy. Rather, the task is conceived as primarily one of aiding the student in the process of philosophizing. She is aided in this process by the rich resources of materials, both classical and contemporary, within the discipline of philosophy. In addition, contemporary novels, drama and poetry are utilized, both to clarify existential questions, and to provide possible ways of answering such questions.

2. WHAT IS THE BASIC CONTENT OF THE COURSE?

The content of the course has evolved during the period of intensive development. Until the 1965 revisions the course was divided into three major units each semester. The first semester began with an introductory investigation of the nature of philosophy in the philosophical journey which may be entered into by students. Unit I was entitled "Existing: Self and Society". The attempt here was to raise the questions about what it is to be a human being, to raise alternative questions to the questions posed, and to draw upon a variety of resources which have given varied answers to the question "What is man?" Unit II was a study of the problem of knowing. The unit was entitled "Symbolizing: Myth and Logic". The attempt here was to discover the varied symbolic processes,especially that of mythology and of logic. The last unit in the first semester dealt with basic religious questions under the topic "Believing: Faith and Religion". The problem of belief in God was the primary one dealt with in this unit.

The three units in the second semester included: (1) Creating: Aesthetics and Metaphysics (feeling and form), (2) Knowing: Epistemology (sense and non-sense), (3) Ethics and History (freedom and authority).

The course as modified in 1965 is given a constant and cumulative development, graphed by a horizontal pyramid or crescendo. Beginning with an examination of (1) self, the development continues through (2) ways of knowing and (3) the questions of the absolute or God.

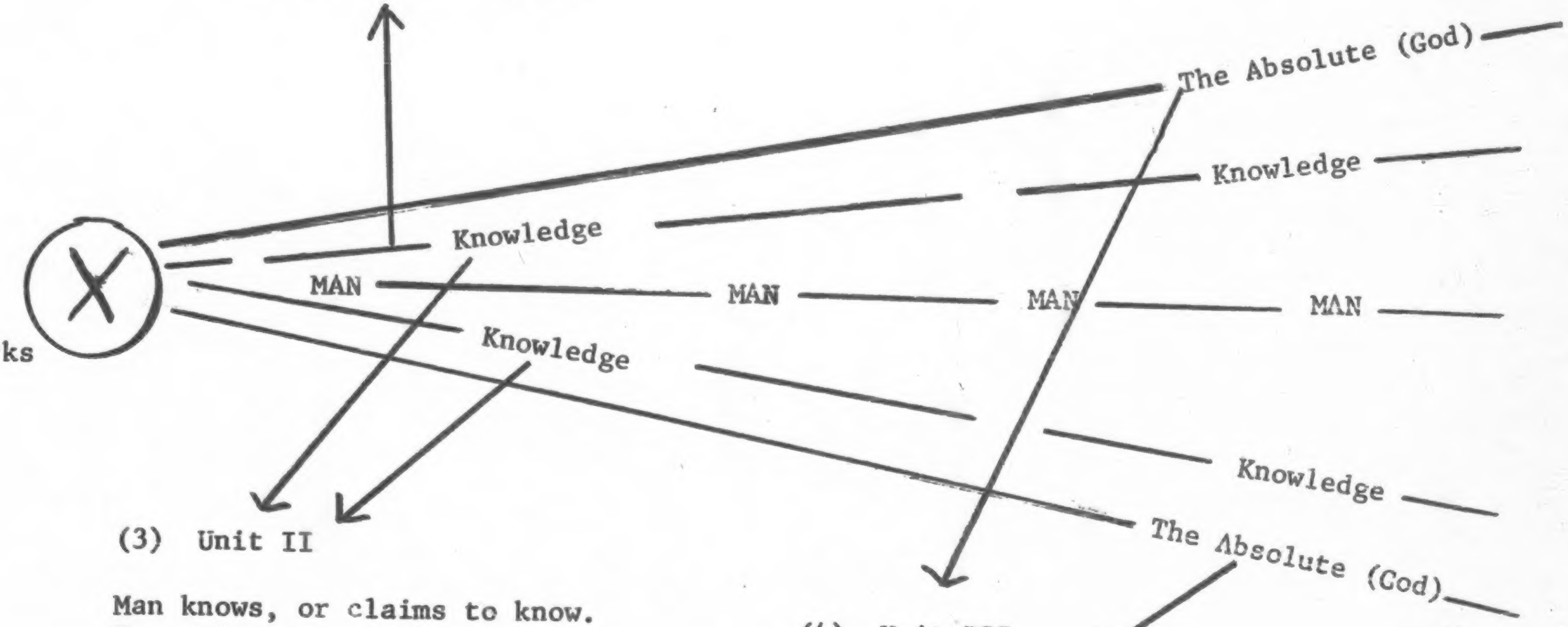
Building upon concepts of man, knowledge and the absolute, the second semester continues to enlarge with studies of (4) religious communities, (5) ethical concepts, and (6) the application of philosophy. The concluding unit of the semester, in showing the relevance of philosophical analysis, will examine such topics as "progressive" education and Marxist theories.

The clearer framework for cumulative development may be approximated in the following graphical presentation.

(1) Introduction: The nature of the Philosophic Enterprise and the tools with which the philosopher works

(2) Unit I Existing

The starting point of philosophizing is the self through introspection on the one hand, and a study of classic views of "Man" on the other. The philosophic enterprise thus begins.


X
The Absolute (God)
Knowledge
Knowledge
MAN
MAN
MAN
MAN
Knowledge
Knowledge
The Absolute (God)

(3) Unit II

Man knows, or claims to know. Two main ways of knowing are examined--

(a) The Empirical-Logical way
(b) Mythology & Intuition

(4) Unit III

But self-understanding and an awareness of how one may know leads to an exploration of a question which has haunted man in all times: Can the Self Know anything about an abolute--a God? If he can, what is the nature of the reality called "God"?

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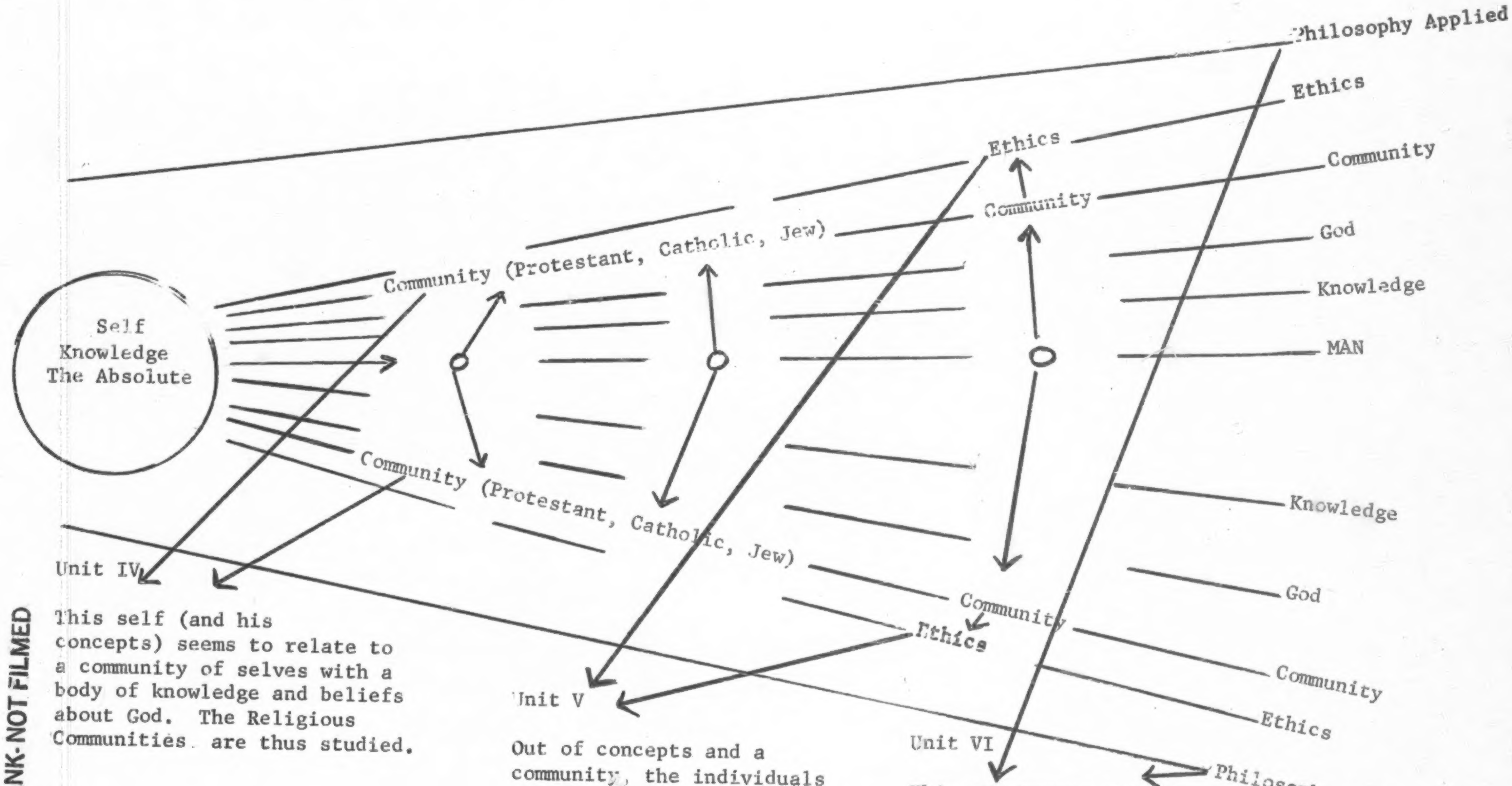
Philosophy Applied
Ethics
Community
God
Knowledge
MAN
Knowledge
God
Community
Ethics
Philosophy Applied
Self
Knowledge
The Absolute
Community (Protestant, Catholic, Jew)
Community (Protestant, Catholic, Jew)
Ethics
Community
Community
Ethics
Unit IV
Unit V
Unit VI

This self (and his concepts) seems to relate to a community of selves with a body of knowledge and beliefs about God. The Religious Communities are thus studied.

Out of concepts and a community, the individuals and groups act. Their claims of moral action are examined through religious and philosophic ethical theories.

This continuous philosophizing appears to be expanding with Man, at the center, with his tools of Knowing, and with his concepts, dealing with a range of issues which confront him on every side--politics, education, international conflicts, etc. The course concludes with an attempt to think creatively about several key 20th Century issues: (1) Marxism--with its views of Man, Knowledge, God, Community and Ethics; (2) American Education (especially instrumentalism, with its views of Man, Knowledge, God, Community and Ethics.

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These particular areas of study have evolved over a number of years of teaching the course. They have been arrived at through the experience of the faculty in their discussing with students those issues which seem to be most consistently pressing in the student's minds. Various devices have been used for selecting the questions. For example, at various points in the year, students are asked to write a list of the kinds of questions which they feel they must have answered within the coming months. At other times, faculty members have simply jotted down those issues which have been consistently and persistently raised in personal conferences and in class discussions. Finally, careful investigations have been made of the most used textbooks in general philosophy to discover those philosophical problems which have been dealt with in the western world and which are being used in the best courses in philosophy.

In addition to the above, the faculty have attempted to develop units which have their own internal integrity and units which will contribute to the next unit of study, so that during the course of the year, the pattern of investigating the issue, the various ways in which possible solutions are reached, and the pattern of understanding a human experience in a given area will be cumulative in other units or areas of the philosophical investigation. For example, during the first semester the examples chosen include in the following order: existing, symbolizing, and believing. These three are chosen under the assumption that the human being exists and becomes aware of existing before he enters into any sophisticated process of philosophizing. But as a person becomes aware of himself, he enters quickly into the process of symbolizing through various means of communication. But the third area, that of believing or constructing systems of thought, depends upon the symbolizing process, and also upon some awareness of what it is to exist and be a human being. As the course moves into the second semester, units are built around the theme of (1) creating, (2) knowing and (3) choosing. It is believed that not only philosophical themes being dealt with but that aesthetics, epistemology and ethics normally follow in the development of a personal philosophy of life in that order.

One of the major purposes of the course has been to integrate a wide variety of subject matter into the class presentation and informal discussions. It is often said to students that all information and knowledge is the subject matter of philosophy. Therefore, all that is read and talked about in any class is relevant for discussion in philosophy. Special use is made of movies, poetry, literature, drama and the other arts. And since philosophy is, among other things, an attempt to sensitize one's perception about himself and the whole range of human experience, and since the hope is to make sense out of experience, and since the philosopher assumes that a rational understanding of the totality of life is the means by which one makes sense out of this life, the faculty is persistently making an effort to integrate the widest possible subject matter into the course.

Between 1959 and 1965, as has been suggested above, the basic difference in course content is that no longer are materials assigned totally from classical philosophy. Although we do use Plato's DIALOGUES for example, this assignment may be followed by a reading of Albert Camus' THE FALL, Victor Frankl's THE SEARCH FOR MEANING, Eric Fromm's THE FORGOTTEN LANGUAGE, or a collection of contemporary essays such as Huston Smith's THE SEARCH FOR AMERICA or Adrianne Koch's PHILOSOPHY IN A TIME OF CRISIS.

A most recent innovation is an ongoing effort to integrate ideas and insights from Asian philosophy and religion with Western thought as fundamental problems are studied.

3. WHAT ARE THE PRINCIPAL METHODS OF INSTRUCTION?

The principal method of instruction in the course "Basic Beliefs in Human Experience" is a dialogistic one. The effort is made for faculty and student to both become a part of the entire process of philosophizing where the totality of the human being meets one another in an attempt to understand the fundamental questions of human existence and to explore possible ways in which one can deal with these questions. Although this process is primarily an intellectual one, the effort is certainly to provide a context in which the deeper aspects of feeling and attitude can be revealed to one another and related to intellectual processes of inquiry.

In addition to this informal give and take between faculty member and student and student and student, there are times when faculty members present background material. Other times resources such as films are used to elicit response of students or to present factual data. Occasionally students are invited to listen in on a vigorous discussion by faculty members who themselves are engaged in the process of clarifying conflicting beliefs, sharpening differences, and attempting to understand the convictions of one another. As a result of the informal ways in which classes are handled, every student spends a great deal of time in private conversation or in voluntary seminar type groups exploring more deeply issues which have been raised during the more formal class sessions.

In addition to discussion, lecture, film and project methods of teaching, a three-week "self-study" in logic will be initiated in all sections. This programed unit has been developed over the previous three years by Dr. Leslie Bates and Mr. David Higgins. Students will use a self-study manual revised by Dr. Bates. Two common examinations will be given to all students.

Because the aims of the course are to develop a philosophical attitude

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rather than knowing philosophy, the general processes of teaching are believed to be thoroughly in harmony with the aims of the course. Only if the purposes were to teach what other people have said, would a pure lecture method be an appropriate way of teaching. Since we cannot embrace the attitude that the purpose is merely to learn the thought of others, the lecture method is a secondary means of instruction. It is expected that the process, which becomes a familiar one in class--namely, the sharing of feelings, insights, attitudes, and beliefs with one another--will be carried on informally by students in their residence halls, in discussion groups and wherever persons meet to discuss what matters most to them. And it is certainly hoped that even human relations will be improved as the persons become accustomed, not to arguing, but to sensitively listening and speaking with others.

4. HOW IS STUDENT ACHIEVEMENT EVALUATED?

Student evaluation is always difficult in a course which is primarily focused in the direction of the development of sensitivity of beliefs and of a philosophical method. Such a course demands that examinations be essay type which are graded on the clarity of thought, adequate use of language, and ability of the student to differentiate between ideas, and to interrelate complimentary ideas. Such essay examinations, along with regular class discussion provide the means of evaluation within the semester. In addition, evaluation sheets are provided at the end of the semester to help the student recall the six or eight paperback books which have been read and to rate which of the books have seemed to be most helpful in their own philosophical process.

It is always difficult to judge the relationship of course enrollment with the evaluation which students have placed upon the course. Nevertheless, since "Basic Beliefs in Human Experience" is a subject which demands a great deal of reading, it would be supposed that students would believe it to be a difficult course, at least one which takes many hours of studying. It is interesting to note that the course continues to be an elective course and that the enrollment in the spring of 1959 was 182, in comparison to the fall of 1965 which has an enrollment of 351. This suggests that students rank the course as a significant one and one which they recommend to other students should be taken. Nevertheless, we have not yet arrived at any significant "break-through" as a means of evaluating the effectiveness of the course.

5. WHAT EXPERIMENTATION HAS ACCOMPANIED THE COURSE DEVELOPMENT?

5.1 In 1961 an intensive self-study syllabus in Logic was prepared by Dr. Bates. It was used with a group of 100 students. They were given one entire week free from all other classes to spend in the area of logic. They were then tested on it. This experiment continued and during the 1965-66 academic year students in all sections of the course will be given the self-study material to master. They will remain in their regular class sessions but will be freed from other assignments to be able to spend time with the self-study materials. It is expected that adequate information will be gained within several years, making it possible to decide how effective self-study materials in Logic may be and how other self-study materials might be developed for parts of this course.

5.2 An experiment is taking place in the matter of scheduling. During the 1963-64 year, two hundred students were enrolled in the course in sections meeting at 11 o'clock on Monday, Wednesday and Friday. At regular intervals, at least once each month, these two hundred students met in one place for a special lecture, a movie, a dialogue between the various professors, or for some other reason when a large group instruction session seemed as effective or more effective than the smaller groups. Modifications of this procedure are continuing.

5.3 During the year of 1961-1962 and 1962-1963 one section each semester was scheduled for second year students only and one section each semester was scheduled for first year students only. The effort was to see whether the class was a more effective one for either of the two groups. Whereas it became clear that second year students had more background of experience in subject matter to make use of the philosophy course, and even though the class tended to elicit somewhat more participation, there did not seem to be adequate difference to justify a decision that the course should be given only to second year students. On the contrary, the subjective judgment of the faculty members involved was that the course was effective, if in a different way, for first year students and ought to be maintained as a class open to students of various academic levels.

5.4 Although each of the instructors of the various sections follow the same syllabus and assign the same type of readings, different faculty members have experimented with a variety of kinds of additional assignments. The results of these assignments and the evaluation of the faculty member is shared in weekly staff meetings. For example, one or two faculty members ask the students to write a daily philosophical log in which they record their own reflections, observations and insights about the common experiences of life. The faculty members have made use of drama and poetry readings. Occasionally there have been demonstrations in class of modern dance or music.

Classroom discussions in Basic Beliefs in Human Experience often continue at the Retreat Lodge.

Each of these experiments has been shared with other members of the staff and has been either adopted or rejected as resources or ways of teaching for other sections.

6. WHAT ARE THE NEW DIRECTIONS OF THE COURSE AND THOSE THAT NEED FURTHER STUDY AND DEVELOPMENT?

Summarizing the new directions of the course may be best made by suggesting four guiding principles which serve as a way of continued development of the course and evaluation of our own teaching. They are as follows:

6.1 If the task is to be philosophical, rather than to know the philosophy of others, the first principle is the recognition that philosophical effort begins through a person's sensitivity and perception to the primary data at one's disposal. These primary data include awareness of one's feelings and experience, an awareness of the general ideas of people in the immediate environment, and an awareness of the general ferment of ideas and attitudes of which the person is already a part.

6.2 The second task of the philosophical process is to find some kind of intellectual framework or pattern which will provide a way of coherently understanding the human experience which the person has become sensitive to. This principle is the principle of pattern making.

6.3 Thirdly, the philosophical process involves an attempt to develop ideas and concepts which help relate pattern to pattern for the broadest possible understanding of the human experience.

6.4 Fourthly, the student should become aware of the knowledge framework (and symbolic system) in which she is working. At the same time, she should become aware of alternative systems of ideas different from her own and found in various academic disciplines.

As faculty members are continuously examining these four principles, as they find new materials which are helpful to achieve the general objectives of the course, new directions from week to week emerge which are passed on to faculty colleagues in an effort to make this basic course a fundamental one, both for the enrichment of the life of the student and as an integrative agent in the entire general-liberal studies.

FOUNDATIONS OF NATURAL SCIENCE

A Report on the Development of the Basic Course In the Division of Sciences and Mathematics at Stephens College

1959 - 1965

by

Dr. Alfred Novak

1. WHAT MAKES THE COURSE BASIC?

1.1 A course is basic in any or all of these senses:

1.11 The structure of the course is basic in that other courses within the field build directly upon it. This would be best described as a foundation or a fundamentals course. It is in no sense of the word an elementary course.

1.12 The structure of the course is basic in the sense of providing the substantive and operative framework of a sound general education i.e., content and mode of operation are segments of a ring with other disciplines such that each is complementary or meshed with other general education courses on campus.

1.13 The structure of the course is basic in that the course deals with a few of the most significant ideas in science and when most appropriate uses modern or up-to-date material and the latest equipment. This is then to be treated in some depth toward "real" understanding.

1.2 The course in Foundations of Natural Science fulfills all three of the above criteria. First, it is a course which deals with fundamental areas of matter and energy, cellular structure and metabolism, reproduction, genetics, and evaluation upon which knowledge one can then build a program in chemistry, physics and biology. Second, the course deals with the development of ideas which involve consideration of philosophy of science, the modes of inquiry, the history of an idea, the techniques of investigation and the limitations of scientific exploration. This should substantiate or reinforce modes of inquiry in social science and philosophy, and complement modes of inquiry in the humanities and religion. Third, the course deals with the nature of our world and man's understanding of it and his role within it.

1.3 The rationale for such a course can best be given from the preface to the two volumes in the course--namely, "A Word to the Wise is Insufficient"....

A Word to the Wise is Insufficient

"The old adage, a word to the wise is sufficient is modified as in the title to suggest a quite different connotation of the phrase than normally used. Of course, as generally used it means that the wise learn very fast. In the sense used in the title the phrase means that the inquiring scholar, the keen intellectual, the seeker of knowledge, is never satisfied with _a_ word. He wants to know the meaning of the word, he wants to know its derivation, he wants to know similar words, he wants to know more words and he wants to know how the word relates to his experiential world although he recognizes that the word _is_ part of this world.

The scientist is one of those individuals who is best characterized by an insatiable curiosity as to what makes objects tick. He wants to know more about things. He wants to know the properties of things, and he wants to know something about their behavior and their relationships. He deals with both inanimate and animate objects. He wants to know about the past, the present and the future.

In his handling of these objects, he operates in a way or in ways that have been rather successful--successful meaning that things are in control or that ideas work. The scientist behaves as if he knows what (operation) he is doing, and the results (products) look as if he knows what he is doing. (It should be understood at this point that he may be a she but for simplicity of writing throughout this volume, we will give the scientist a masculine form.)

If a satellite with a man in it is shot off the surface of the earth, makes four orbits and lands in a fishing net 100 yards from a destroyer, we imagine that the scientists have good control over the dynamics of the total situation. We say that they know what they are doing. If a surgeon plugs a hole in the heart of a blue baby with a plastic plug, sews up both the heart and the incision, the baby turns pink again, we say that he knows what he is doing i.e., he has complete control.

The process of discovering the secrets of nature (which often are kept well hidden) and of gaining control over the natural order goes under the over-simplified phrase--'the scientific method'. The process of carrying out discoveries of utilizing them for the benefit of man goes under the over-simplified word--'technology'. For the most part, doctors, dentists, fish and wildlife experts, geologists, engineers, draftsmen, statisticians, technical aids, etc., are engaged in the theoretical part of science. A number of individuals are engaged in the theoretical side such as astronomy, pure mathematics, theoretical physics, theoretical biology, and theoretical chemistry. Most scientists, however, are involved in both technology and pure science to a greater or lesser degree.

In the most 'scientific' activities today, the 'successful completion' of a project is the direct result of the cooperative efforts of a large number of talented, well-informed individuals working with one phase or another of the task at hand and working over a 'long' period of time in developing and refining the ideas.

The most exciting part of science is not the end result. It is the knowledge that in theory it was expected to work. When a rocket gets to the moon, the excitement of the public will be in the event, whereas the excitement of the scientist will also be that of the verification of a large bundle of ideas.

The end results of science are the fruits of theory. The jet is one of the fruits of thermodynamics, while the bridge spanning the Mackinac Straits is one of kinematics. The cure for cancer will be one of the fruits of cell theory and metabolic theory. The cure for hardening of the arteries will stem from theories in organic chemistry. The television set is a product of G. E., WESTINGHOUSE, Motorola or what have you and is the creation of Edison, Maxwell, Faraday and DeForest. The prevention of bacterial infection may be due to Listerine, ST-37, Merck, Eli Lilly and Upjohn to name a few, but the concepts that make this possible are the fruits of Pasteur, Koch, Ehrlich and many others.

In any case, the world of science is an interplay of the mental process and the stimuli reaching us via our sense organs. The energies and form of these stimuli may stem from the world outside of our bodies. An object emits light or reflects light and we see it. An object emits sound and we hear it. An object has weight and shape which we can feel. Once having perceived, we can think about these things.

Aristotle's concept of scientific method in his investigation of nature involved three approaches 1) historical, 2) logical and 3) experiential. The first consisted of an inquiry into the knowledge and the arguments of his colleagues or predecessors so as to obtain a footing in the exploration of the idea and to gain some understanding of the problem. The second consisted of an analysis of the logical structure of the problem. What assumptions or axioms are used in tackling the problem and how do they control the direction of the argument? What are the basic principles and what inferences can be made from the data? The subject under investigation is analyzed for the terms, the propositions and the deductions made therefrom. The third aspect treats of the first-hand experiential investigation of objects and their relationships. Its essence involved a study of the shape, color, size, order and position of objects. It also involved the motion of objects and their interrelationships.

Other Greek philosophers were not quite as thorough as Aristotle. Plato, for instance, was involved most of the time in a formulation of logical or theoretical systems without heed to data while Democritus put his attentions to natural phenomena while neglecting to formulate theories to account for the events. Aristotle tried to do both. In the biological sciences he concentrated on gathering data from natural events while in the physical sciences he often spent more time in developing theoretical explanations than in the pursuit of factual information. Socrates' inquiries led him to two processes which he was first to employ: inductive arguments and universal definitions, both of which we shall say more about later. Pythagoreans formulated a few definitions but for the most part were engaged in the translation of nature into mathematical form--numbers.

Aristotle says, 'Wherefore those who have dwelt more constantly on investigation of natural phenomena are able to set up as hypotheses such principles as can be applied coherently to many instances: while those who have been rendered unobservant of the facts by many arguments find it easy to make pronouncements on the basis of a few observations.' [1]

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[1] On Generation and Corruption 1.2.316a5-14.

Louis de Broglie, the great wave-theory physicist, has this to say: 'In the nineteenth century there came into being a separation between scientists and philosophers. The scientists looked with a certain suspicion upon the philosophical speculations, which appeared to them too frequently to lack precise formulation and to attack vain insoluble problems. The philosophers, in turn, were no longer interested in the special sciences because their results seemed narrow. This separation, however, has been harmful to both philosophers and scientists.'

Thus we see science as a Janus--a two-headed organism: one head doing the thinking; the other head doing all the observing. Each scientist in whatever his discipline uses a particular mode of attack or 'scientific method' dependent on the nature of his problem, the time element, the physical resources at hand, his intellectual capacity and his objectives.

There is no one method in science just as no one key unlocks all doors. There is no one path to scientific discovery. The road is not straight and it is not narrow. There are many blind alleys and there are many bad days. The work is not all glorious--it is often somewhat tedious. There is no easy system. It is not simple. It is often not straightforward. Science is not quite like what Karl Stile depicts it. He says: 'In experimental investigations, the solving of problems by the scientific method involves six steps, mentally, which will be called the techniques.' [1] The method may involve two steps, six steps or twenty steps. It is exciting, however, and it is workable.

In this Age of Science, educated men and women must understand something of the nature of scientific inquiry and its social implications if progress in a democratic nation is to be made. Science is autocatalytic i.e., it is self-energizing. Its growth is accelerating. The very nature of science is change. It will continue to grow and to change and with it the world will change. It is said that the legendary Rip Van Winkle slept 20 years. If you went to sleep today and slept two decades, what kind of world do you imagine you would wake up to? Would it be greatly changed from today? It is your task to understand enough about it so that you will adapt the world to you or you will adapt to the world.

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[1] "The Scientific Method", Turtox News, Vol.27 #1, January 1949.

Ignorance is not bliss; ignorance is futility. Ignorance is not life; it is existence. A full life and a good life require wisdom. Wisdom arises out of understanding. Understanding arises from the pursuit of knowledge. This year you will be in the lab inquiring about the nature of the scientific process. It will take all of a year to begin to understand. A word to the wise is insufficient."

1.4 The behavioral changes expected in the student are fourfold:

1.41 The student should become more comfortable in the area of science. Some of her fears should be allayed and she should have a wholesome interest in scientific problems and events.

1.42 The student should begin to read, enjoy and understand more articles in science like those in periodicals such as "Life", "Time", "Scientific American", etc., and she should be in a position to discuss the contents with some confidence.

1.43 The student should be able to think through scientific and perhaps other types of problems with greater ease and with some vigor. She should learn to be more analytic and more synthetic. She should be able to develop a plan of investigation.

1.44 The student should become more sympathetic to national scientific needs and to the relatively slow scientific progress in areas of cancer control, degenerative diseases, and space exploration i.e., the student must be aware of the limitations of science. This is to be reflected in discussion and voting behavior.

The aims of this course have not changed since its inception--its implementation has changed.

2. WHAT IS THE BASIC CONTENT OF THE COURSE?

The course has two great areas of concern. In the first semester the student is introduced in some depth to a few concepts concerned with the nature of matter and the interactions between matter and energy. This includes an analysis of the atom, nuclear and chemical energy. Toward the end of the first semester, the student is introduced to the concept of the organic molecule, cellular structure, and dynamics. In the second semester the reproductive process, the genetic process, the process of evolution and biological interrelationships are treated in some depth.

The outline of each semester follows:

First Semester:

- PHILOSOPHIC SUBSTRUCTURE OF SCIENCE. LEVELS OF ORGANIZATION OF KNOWLEDGE
- ATOMIC STRUCTURE OF MATTER
    - ATOMIC NUCLEUS AND NUCLEAR THEORY
    - ELECTRON RINGS AND CHEMICAL THEORY
    - ELEMENTARY PARTICLES AND ATOMIC TRANSFORMATIONS
- ATOMIC ENERGY
    - NUCLEAR ENERGY-FISSION
    - CHEMICAL ENERGY-FUSION
- ATOMIC RADIATIONS AND RADIATION DAMAGE

MOLECULAR STRUCTURE AND MOLECULAR ENERGIES

EARTH STRUCTURE AND CHANGE

THE ORGANIC MOLECULE (MICRO AND MACRO)

ORGANIC SYNTHESIS

CELLULAR STRUCTURE AND DYNAMICS

Second Semester:

MULTICELLULARITY AND THE DEVELOPMENT OF SYSTEMS

SYSTEM STRUCTURE AND FUNCTION

CELLULAR CONTINUITY

ORGANISMIC CONTINUITY

GENETIC CONTINUITY

- THEORY OF THE GENE
- POPULATION GENETICS

SPECIES CONTINUITY AND CHANGE - EVOLUTION

BIOLOGICAL INTERRELATIONSHIPS

The principles used in choosing this particular content were twofold. One, the concepts involved are of the utmost significance in the sciences generally. They deal in areas which provide the most penetrating and permeating threads of information in the whole structure of science. Two, the concepts are developmental, environmental, and are particularly resonant with scientific inquiry. This is not to say that some other areas could not be equally responsive to the objectives. In order to fulfill the objective of understanding to the fullest, it is necessary to concentrate productive energies in only a few directions. When more than one avenue of science was appropriate, the choice was made in the direction of student interest at the most relevant time and place. If energy of motion is a concept worth developing, it would be done better in a laboratory by dealing with falling bodies (not students) which students can feel and handle, and deal in lecture with nuclear particles which students read about and are excited about and which are not amenable to laboratory situations on this campus. We capitalize on student interest in the laboratory via the sensations of feeling, seeing, hearing, etc., even drawing on the emotions e.g., mineral crystals are examined under the stereomicroscope which reveals the color, symmetry and arrangement and which stirs the poetic, artistic or literary repositories of the mind. We capitalize on the students' interest outside the laboratory in terms of involvement with the frontiers of science e.g., matter is approached from the nuclear power position and biology is taught via the molecular approach--attacking problems in the physical sciences and biological sciences from the most basic levels of molecular structure and interaction.

Attention to the integration of chosen subject matter is inevitable for two reasons: first, the more fundamental the concepts, the more lines of permeation must exist. Thus, the concept of matter and energy is integrated with chemical properties and behavior, with living protoplasm and its struggle to exist. Again, the concept of matter and energy is integrated into geologic structure and the changing features of the earth. Again, matter and energy as a concept is integrated into the concept of structure and function of different systems in organisms. In the area of interrelationships, matter and energy relationships on the biosphere level are considered. In essence, the concept of matter and energy permeates the sub-concepts of levels of organization of physical and biological systems from the sub-atomic level to the atomic to the microscopic, to the macroscopic and finally to the biosphere level (the total plant-animal-environment configuration).

The content of the course has changed only slightly since its inception.

Both lecture and lab have had reduced emphasis on the earth sciences.

3. WHAT ARE THE PRINCIPAL METHODS OF INSTRUCTION?

The principal method is to place the student in the position of the investigator. The investigator wants to know something. It is either an answer to a problem posed by him or to him or is an attempt at fulfillment of curiosity about the nature of the world in which he lives. In either instance, the quest can be expressed as a question. Thus the method of the course can be described as problem-solving although it is more aptly question-answering. At the very beginning of the course the student is placed in a position of Descartian analysis wherein the problem-solving situation is devoid of the usual perceptive observations available to the individual. As an example, the student starts with a black sealed shoebox containing an object. The problem is to identify the object with whatever observations can be made. The observations are necessarily minimal and so the girl must rely on the probing acuity of her mind. The girl is forced into thinking deeply as how to get at properties of length, weight, size, shape, color, odor, etc. of the object within the box. Under these circumstances, the rational process takes on form. In the second laboratory situation, the student is confronted with a series of "familiar" liquids (labeled with numbers but unnamed) where remembered properties of similar-appearing substances are put into juxtaposition with the unknown and where analogous reasoning is put into play. Once an unknown is guessed at name becomes the object of concern and analysis. From this the student works up a series of tests to compare the unknown with the "known". In this way, the student becomes familiar with scientific inquiry namely setting up an experimental design, delineating and testing an hypothesis or hypotheses, classifying data, etc.

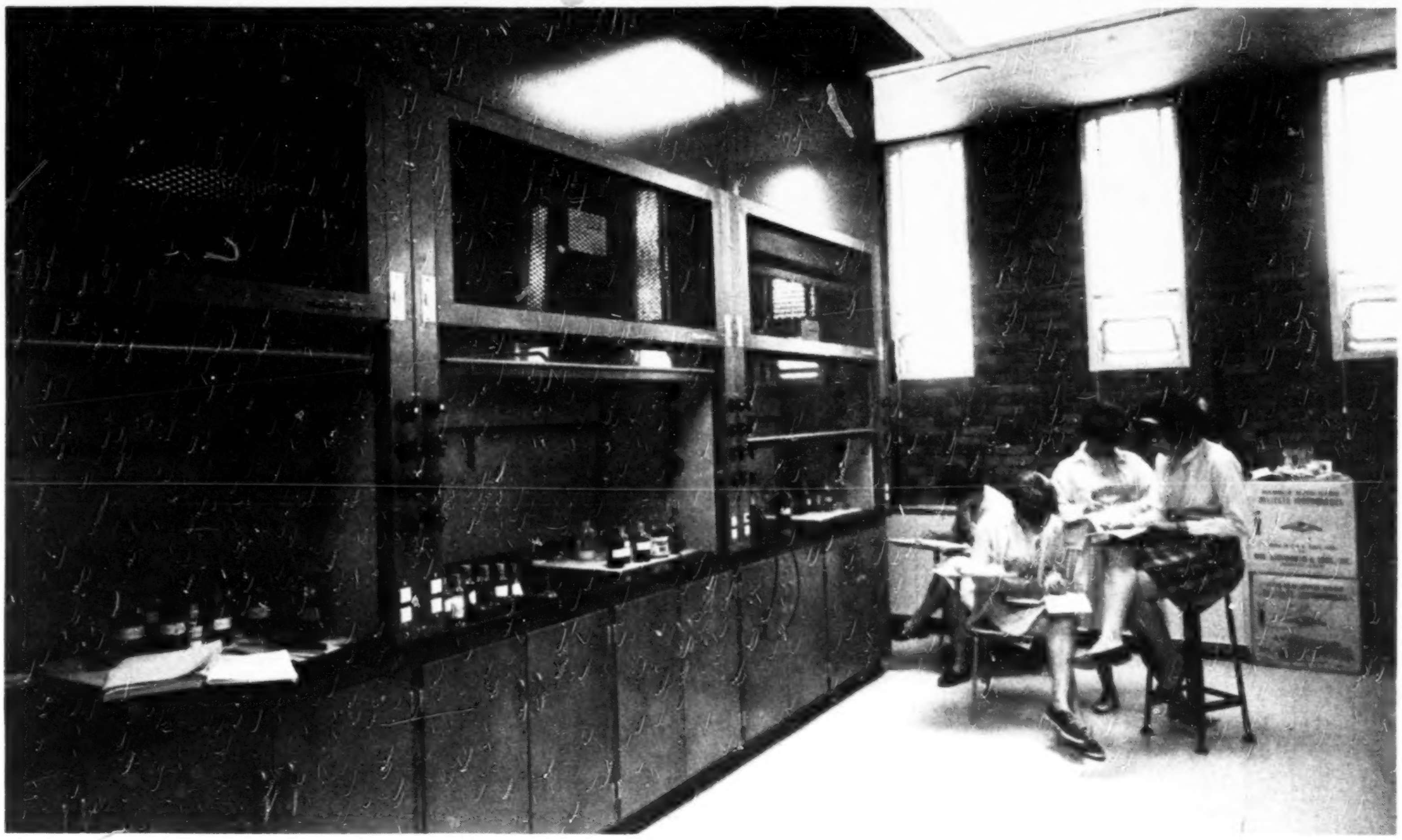
Throughout the course, the student goes through the paces of the scientific operation. In fulfillment of one of the aims which is to develop an ability to proceed in a rational manner (scientific) toward solution of scientific problems, the program engages the student in activities which explicitly bring out salient features of scientific procedure. Laboratory studies are so named e.g.,

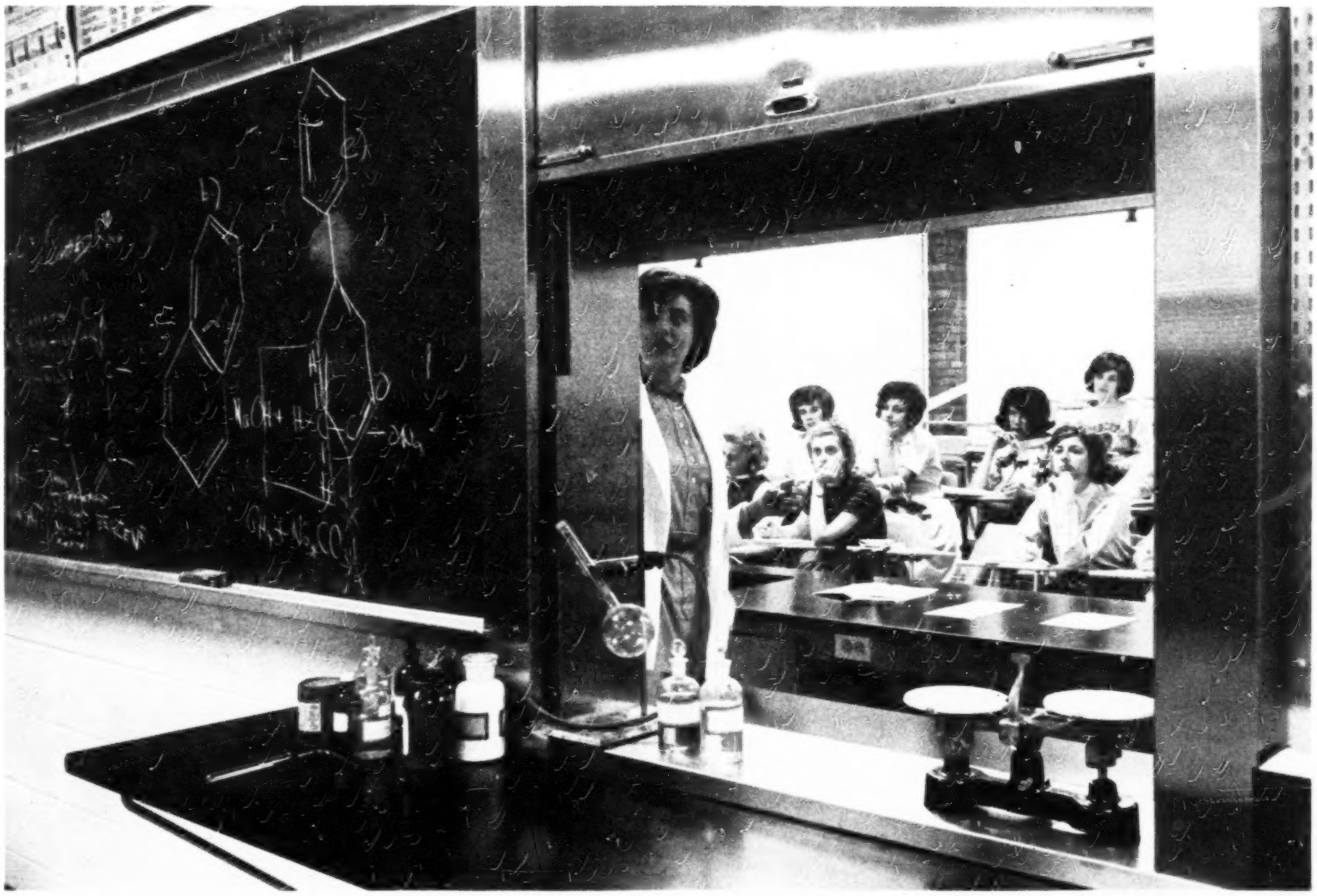
Empirical Observations with Limited Perceptions
Empirical Observations with Unlimited Perceptions
Problems in the Transmission of Information
Reasoning from Prescribed Data
Reasoning from Original Data
Multiple Factors in an Event-Photosynthesis
Rate Phenomena
Classification of Matter
etc.

Although the course is laboratory-centered, students meet twice in one week for lectures. At this time ideas are developed. Information as such is given via lectures or reading assignments. The eclectic nature of science is revealed by directing students to the library for other sources of information, ideas or opinions. The text is not handled as a sacred part of the course. It is a source to lean upon. It is never the sole source of information.

Whenever possible, the discussion period of the week (1 hour) is used for discussion and elucidation of ideas developed in the lecture or laboratory, or for discussion of data or procedures in the laboratory. Occasionally, the two hours in the laboratory period is insufficient and lab work spills over into the discussion hour.

Foundations of Natural Science course offers opportunity for students to work in well-equipped laboratories with supervision of professors as well as to attend lectures and demonstrations.





Concepts and information gathering are supplemented with movies--the Atomic Physics Series and Encyclopedia Britannica film series--reviewing and/or revealing aspects of science not easily done in lab or lecture.

At the present time, a few programmed units are used to dispense information rapidly or at no expense to formal classtime. One unit written by Pamela Spacie is designed to provide background in basic mathematical concepts. The second unit is an extensive programmed unit in basic genetics produced by Chester Lawson and Mary Alice Burmester of Michigan State University. Both units relieve the teacher of large masses of time and energy which can then be devoted to elucidation of concepts built upon the programmed units.

In addition, short-taped-colored slide units in environmental biology are being tested as ancillary study units for work outside class. A microscopic slide library, a stereo microscope and a compound monocular microscope are available in the main library for study during those hours in which a laboratory is not open or available. Field trips are made two or three times each year to supplement the regular laboratory. Field trips are made only when the concept being taught connot be taught as efficiently or as realistically in indoor laboratories as in outdoor laboratory conditions.

4. HOW IS STUDENT ACHIEVEMENT EVALUATED?

The most difficult aspect of any teacher's job is to assess the behavioral changes within the student over the course of time during which the student is engaged with that particular teacher. At this time, we are dependent on the most ancient and perhaps the most inadequate evaluative techniques--the written test. These are one of three kinds:

1) the short quiz-objective and essay covering a small fraction of the learning experience;

2) the one-hour test-objective and essay covering a larger fraction of the learning experience;

3) the practical test--a visual response test under laboratory conditions.

In each of the above cases, the test is designed so as to elucidate two types of responses: 1) sheer information recall and 2) relationship and integrative ability. The student is asked to place learned data or "facts" into relationship with other learned data or to draw insights or deduce consequences.

Improvement in the development of such items is constantly being sought. In all cases it is recommended that such testing devices become teaching devices i.e., all such tests and questions are to be returned to the students and discussed.

Oral responses are part and parcel of the discussion period each week. The student's ability to discuss concepts, delineate facts or express opinions is tested here.

In all of the above, the educational growth rate of the student is not measured inasmuch as we have no pretest available yet that will adequately reveal a student's understanding of facts and concepts at the very beginning of her year. Plans are in progress to develop such evaluative devices as are necessary to measure growth in understanding.

Attitudes are a most fundamental objective as as yet we have no good test of such behavior. Present tests are either too broad in scope or are designed so that the student knows what answer is expected. New attitude exams are being tested around the nation and we hope to have these available on our own campus.

The present evaluation program is still not sufficiently pedagogically sound. We intend to experiment on punch-hold objective exams which reveal answers. This type of test is an improvement over the typical "black-mark" multiple choice exam inasmuch as 1) the answer is immediately revealed which gives great reinforcement, 2) the number of guesses made in getting at the right answer is immediately evident, and 3) the instructor has a punched record of the results.

We would also like to develop a series of stepped-up self-evaluation devices which start from the sheer recall and move through more and more complicated abilities in reasoning.

A very great need is to have on this campus a team of individuals who could spend a major portion of their time developing techniques of evaluation and preparing a variety of examinations for the Divisions needing such assistance. Time to do the demanding things is our greatest need. A half-time staff member is necessary for evaluation in our Division. Our present Counseling Service should be augmented with a Testing Service.

5. WHAT EXPERIMENTATION HAS ACCOMPANIED THE COURSE DEVELOPMENT REPORTED HERE?

The course in Foundations of Natural Science is under continuous development. Scientific knowledge is growing at a rate which doubles the information and concepts each decade. Thus some subject matter, of necessity, should become obsolete or less useful. This means that continual purging has to be done. In addition, newer information and conceptual schemes are constantly coming to the foreground and when they are of fundamental significance they must be incorporated.

The student entering college today has emerged from a more dynamic high school experience where at least in science and mathematics great strides have been made to provide an uplifted environment of learning. Thus within a few years, the complexion of entering students will be such that they will be bored by a stagnant college course or program. It is therefore imperative that our Foundations course be one that is up to date and treats concepts in some real depth and appropriate to the University level.

Another development is emerging and that is the increased tendency to make laboratories an experience in scientific process rather than one of duplicating or repeating experiments which are an accomplished fact. Our students are being introduced more and more to investigative procedures as well as to the most up-to-date information within the major scientific concepts. It is mainly through laboratory observation, experimentation, and problem solving that students learn to understand and appreciate methods of scientific inquiry. Here the student may expect to experience the frustrations of delays and failures, as well as the stimulus of creative work and the exhilaration of discovery.

Each laboratory experience is being developed as a full-fledged exploration into nature. The content of each laboratory study is scrutinized and constantly being reshaped. Some of the present studies will be discarded and new ones written. Each laboratory study is being designed to bring out an aspect of the scientific process. The framework of the study is the aspect; the flesh is the subject matter of the concept--it may be investigational or informative. The accretion of information per se is not the function of the laboratory experience. If and when information is gathered, it is either leading toward developing aspects of the scientific process or it is a most vivid way of providing data, for example, chemical properties can be learned from a book; they can be learned better by observing them. Also, for example, the agglutination of cells can be read about in a book; the reaction can better be understood by watching the event. Certain objects and events must be seen, felt, heard, etc. to become well-fixed in the mind. Some physical models and some physical reactions must be part of the apperceptive mass of the student.

Experimentation in utilization of classtime and extra-class time is being promoted. Already all sections for any one instructor are combined into *one* lecture section. Team teaching at the college level has been less vital to students than a one-teacher-student relationship. This program is good when one is attempting to disseminate chunks of specialized information but is distinctively a failure in providing unified concepts or explicit interrelationships unless the team is tightly knit. However, there are occasions when such techniques are very useful. Such prospects are currently being explored especially in the area of visiting lecturers, film presentations and laboratory demonstrations via closed-circuit television. Thus one meeting time for all sections in Foundations may be attempted.

6. WHAT ARE THE NEW DIRECTIONS OF THE COURSE AND THOSE THAT NEED FURTHER STUDY AND DEVELOPMENT?

The present course *is* "new" on this campus as of September, 1961. It has been in continual process of development. It is too young to have gone much beyond "labor pains", thus the *new* directions *are* the present directions.

At the present time, all instructors involved in the course find insufficient time available to develop the present array of concepts. This needs an urgent reappraisal. A 1965 summer workshop reduced content of geologic materials. Mathematical concepts have been sadly neglected. To do a satisfactory job at the college level now and in the immediate future, it is necessary to expect or provide more mathematics in the background of the student. As the course becomes increasingly rigorous, the need will become more and more pressing and must be met soon.

Conclusion

The course is basic both to the liberal education student and to the science and mathematics majors. It provides the philosophic base upon which man's view of the universe rests. These postulates provide the science and mathematics majors the first steps of a deductive system leading to narrower and narrower areas of operation--the highly specialized disciplines.

If this is the last science course for the student, it provides a good base for informal reading; if it is the beginning of a scientific career, it may still be the last general look at a greatly fragmented discipline.

THE CONTEMPORARY AMERICAN WOMAN

A Report on the Development of the Basic Course
In the Division of Home and Community at Stephens College

1959 - 1965

by

Dr. Mary Lou G. Purcell

1. WHAT MAKES THE COURSE BASIC?

Stephens College is a college for women. In the words of President Seymour A. Smith, "Recognizing that the best education for women may be different from that customarily geared to the education of men, Stephens has built its programs upon a realistic appraisal of the needs of women. And it continues to affirm the significance--and the reasonableness--of an education which meets these needs."[1] The course, "The Contemporary American Woman", is basic to the philosophy of Stephens College. Affirming that women are different from men and have differing needs as persons, this course provides a framework in which a student can view herself more clearly as a person, and as a young woman in a changing society. It stresses that making the best use of her educational opportunities and achieving the fullest utilization of her potentialities begins with an awareness of the changing life patterns increasingly available to the young adult of today.

The Contemporary American Woman, now in its fourth year, is specifically for women and about women. It is solidly based on anthropological, sociological and psychological findings related to the American woman. The following behavioral changes in students are hoped for as a result of the successful completion of this course.

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[1] Seymour A. Smith. Stephens College Catalogue. 1965-1966. page 8.

1) The student should become more accepting of herself as a person.

2) The student should acquire an understanding of the changes affecting women in present day society and the forces influencing these changes.

3) The student should become more aware of herself as a person affected by the societal forces at work in our culture, and involving all women in varying degrees.

4) The student should become increasingly aware of her own values--which will determine for her what experiences are valuable and give meaning to her life.

During the course the student is required to write an autobiography in which she looks back on her life as objectively as possible, assessing the major points of decision and significant influences as clearly as she is able to do. The student is also asked to write a plan for self-fulfillment, actually a philosophy of what she foresees as representing fulfillment for her. These two papers together serve to link past and future with the present and help the student see that all are related. Many students, when they begin to plan for the future, are convinced that they will only be guessing. The majority fail to see that the decision making of today is basic to the decision making of tomorrow, and both are based to a great extent on previously made decisions. A girl of 18 or 19 already has many of the values, basic beliefs and convictions which will be the foundation for her life ahead.

Not all of the students will effect all of the behavioral changes hoped for. Each girl will be urged to go as far as she is willing to take herself along this path of understanding and of self-realization toward self-actualization.

The aims of the course have not been changed during these first four years as much as they have been clarified. In establishing this course the College and the instructors launched an educational experiment for which there was no available pattern to emulate. We now feel surer of what we are doing, and more convinced than ever that it is an educational experience which our women students need.

2. WHAT IS THE BASIC CONTENT OF THE COURSE?

In order to give the student some perspective on her own world, the course begins with the historical and anthropological antecedents of the contemporary American woman. Briefly, the changes in the life and status of women are traced from the Hebrews to the present time. We then look at women today in three other cultures--in Japan, the Israeli kibbutzim, and the Soviet Union--two in vignette form and the fourth in depth. These two sections comprise the first half of the semester. The present and the future of the contemporary American woman make up the second half of the semester. The outline of the course is as follows:

Unit I Historical and Cultural Perspectives

- A. The historical heritage of the American woman
    1. The Ancient Hebrews
    2. The Ancient Romans
    3. The Early Christians
    4. The Anglo-Saxons
    5. The Medieval English Period
    6. The Later English Period
    7. Colonial North America
    8. Transition to the Present
- B. The American woman (historical)
    1. The effects of industrialization and technological change
    2. Women and education
    3. Changing legal status
    4. Changing vocational opportunity
    5. Urbanization and the rise of suburbs
- C. Summary--Overview of the continuum of change affecting women

Unit II The Cross-Cultural Viewpoint

A. Women in other cultures

1. Japan
2. Israel Kibbutz
3. Russia

B. Points for consideration in the historical and cross-cultural study

1. Child rearing practices
2. Man-woman relationships
3. Occupational opportunities
4. Educational opportunities
5. The status of women

Unit III The present Context Within Which Women Mature

A. Differences between men and women

1. Physiological differences
2. Psychological differences

B. Cultural influences affecting women

1. The family and woman's life cycle
2. Social stratification and mobility
3. Economic factors
4. Education
5. Marriage
6. Family disorganization

Unit IV Life Planning for a Woman

A. The unmarried adult

B. The homemaker

C. Parenthood

D. Gainful employment

E. Community service

F. Leisure time

G. Retirement

H. Summary--the meaning of self-fulfillment

Since the material for this course is drawn from a number of disciplines, one of the major tasks of the instructors has been the integration of materials. Source books written for other purposes have had to be adapted for use in this course. For example, the first of the four paperback books currently being used in the course, Queen, Habenstein and Adams, The Family in Various Cultures, is a study of the sociology of the family. The students are asked to organize their reading around a completely different classification system from the one used by the authors of the book. Instead of sociologically oriented headings, the following ones are suggested:

1. Child rearing practices. (Selected on the premise that the way in which a child is brought up in a society has much to do with that child's adult years and total outlook on life.)
2. Man-woman relationships.
3. Occupational opportunities for women.
4. Educational opportunities for women.
5. The status of women.

The current writing on the status of women is ballooning, making the thoughtful selection of material increasingly difficult. The fact that the course is one semester long also adds to the difficulty, for there is much to be covered in a short time. The present reading is drawn from both books and current journals. It has been possible to obtain permission to reprint key articles and individual chapters from books where needed. The present required reading is as follows:

Unit I

Queen, Stuart A., Robert W. Habenstein, John B. Adams. *The Family In Various Cultures*. Chicago: J. B. Lippincott Company, 1961 Chapters 1, 7, 8, 9. 10, 11, 12, 13, 14, pp. 1-17, 138-310.

Allen, Frederick Lewis. *Only Yesterday*. New York: Harper and Brothers, 1931. (New York: Bantam Books, 1959) Chapter 5, "The Revolution in Manners and Morals."

Unit II

Goodman, Mary Ellen. "Japanese and American Children: A Comparative Study of Social Concepts and Attitudes" *Marriage and Family Living*, Vol. 20: 4, November, 1958, pp. 316-319.

Vogel, Ezra F. and Suzanne H. Vogel. "Family Security, Personal Immaturity, and Emotional Health in a Japanese Sample" *Marriage* and Family Living, Vol. 23;2, May, 1961, pp. 161-166.

Queen, Stuart A., Robert W. Habenstein, and John B. Adams. *The Family in Various Cultures*. Chicago: J. B. Lippincott Company, 1961. Chapter 6, "The Minimum Family of the Kibbutz", pp. 116-137.

Mace, David and Vera Mace. *The Soviet Family*. Garden City, N. Y.: Doubleday and Company, Inc., 1963. 319 pp.

Unit III

Mead, Margaret, *Male and Female*. New York: New American Library, 1955. Part IV, Chapters 12, 13, 14, 15. Mentor edition, 1955, pp. 184-241.

Parker, Elizabeth. *The Seven Ages of Woman*. Baltimore: Johns Hopkins Press, 1960. Bantam edition, 1963, Chapters 1-9, pp. 1-197.

Unit IV

Halfter, Irma T. "The Comparative Academic Achievemnt of Yound and Old," *Journal of the National Association of Women Deans and Counselors*, Vol. 25: 2, January 1962, pp. 60-67.

Hansl, Eva vB. "Patterns in Womanpower: A Pilot Study," *Journal of the National Association of Women Deans and Counselors*, Vol. 25: 2, January 1962, pp. 81-87.

Zapoleon, Marguerite W., *Occupational Planning for Women*. New York: Harper and Brothers, 1961. Chapters 1, 2, 3, 4, pp. 1-39.

Parker, Elizabeth. *The Seven Ages of Woman*. Baltimore: Johns Hopkins Press, 1960. Bantam edition, 1963, Chapters 22-26, pp. 463-5.

The basic outline for the course has been refined during the three years in which the course has been offered. During its first year it was felt that more students would elect the Contemporary American Woman if it was a one semester course, so it has been offered each semester for the last two years. Considerable tightening of the course was necessary in order to offer it for one semester. Required readings are constantly being shifted in order to find the most meaningful and useful sources available. This process will continue.

3. WHAT ARE THE PRINCIPAL METHODS OF INSTRUCTION?

One of the chief methods of instruction is discussion, utilizing the students' reading. Class discussion moves on to the deeper implications of the material for the understanding of women at a particular time and in a given society.

Some material is presented by lecture, since this is an efficient method for certain things. During the third unit of the course in particular the student reads basic background material while the class periods deal with cultural and societal factors which must be known and understood. During the first year that the course was offered a number of faculty members lectured to the classes, since the subject areas to be covered were so diverse that staff could not hope to be knowledgeable in all of them. While this was a useful method for a first year it presented several problems. Most important was the fact that the students had difficulty in maintaining a sense of continuity, and the lecturers were not always able to follow the established theme of the course, so that material was less pertinent than hoped for.

At the end of the second year, through an arrangement with the Television-Radio-Film Department, six video tapes were planned for recording significant outside lecturers for this course. These tapes will be presented through our closed circuit television system on the days needed. At this point two tapes have been completed, one the physiological differences between men and women by Dr. Alfred Novak, chairman of the science division, and the other a discussion of the occupational possibilities for women after college with an emphasis on the patterns already established by former Stephens students. Mrs. Bernice Williamson of the Counseling Service made this tape. We plan to make several more on the following subjects: psychological differences between men and women, women's role as a homemaker (using a former student as a guest), and social stratification. Others will be added as the need becomes apparent.

Carefully selected films are used during the course, particularly to aid the student in "seeing" women in other cultures. This has also proved to be an effective method for presenting some of the problem areas of life which are ahead, since the personalization of such subjects as retirement and aging are beyond the grasp of most students of eighteen, nineteen or twenty years.

Each student is expected to write two papers during the semester, an autobiography, which emphasizes the student's ability to analyze the factors which have influenced her growing up, and a plan or philosophy for self-fulfillment.

4. HOW IS STUDENT ACHIEVEMENT EVALUATED?

Several references have already been made to the two required papers. The ability of the student to objectively analyze and evaluate the influential factors in her life is the basis for the evaluation of the autobiography. The benefit to the student as indicated by the expressions of appreciation from 98% of the students who have taken the course, justifies its use even though it is time consuming to read and difficult to grade.

There are three unit tests given, one after each of the first three units of the course. The examinations cover readings, lectures and discussions. A final test over readings only is sometimes given during the last unit of the course.

Evaluation is particularly difficult in this type of course since personal growth, maturity and insight are goals, rather than retention of specific facts. It is obvious that students will come to this course with widely varying degrees of insight and maturity. At the present time we have no way of measuring the extent of this, although it would be very useful to know. The real evidence of the value of the course and of possible behavioral change may come only in the student's later life as wife, mother and career woman. This is one reason why it will be important for staff to keep in contact with former students for several years, in order to determine the realistic benefits of the course to individual students.

5. WHAT EXPERIMENTATION HAS ACCOMPANIED THE COURSE DEVELOPMENT REPORTED HERE?

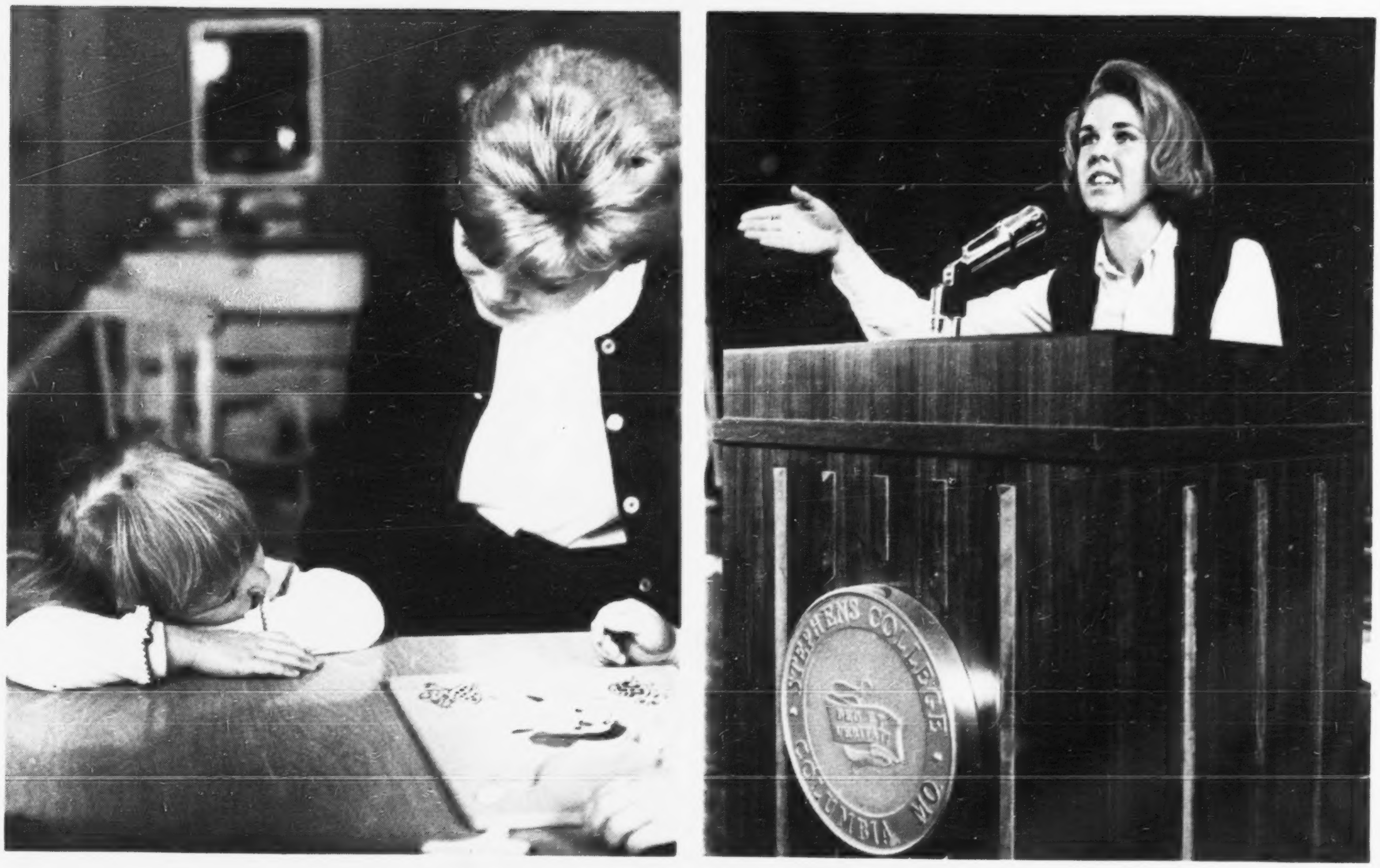
During the spring semester of the first year that this course was offered, the instructors requested that Dr. Lewis B. Mayhew, the College's consultant on research, be asked to conduct an informed evaluation of the course. Dr. Mayhew talked with two groups of students selected from the two sections of the year-long course, to determine their reactions to and judgments of the course. In each interview session the approximately twelve girls were asked broad questions concerning the course and were encouraged to comment as freely as they wished about any matter relating to the course.

In general, the students in both groups liked the course because it forced them to consider themselves as women and to ponder the various roles which are open to them. The majority of the students believed the course was one of the best courses they had taken, but thought that some parts of it were more appropriate than others. Several excellent suggestions for the improvement of the course came out of these two discussions.

At this point, the fourth year of the course, some aspects of the course are still experimental. No group of required readings has stayed exactly the same from one semester to the next. The films have been changed where student evaluation indicated that this was wise. Even the papers which are required have undergone revision in keeping with staff and student evaluation. The change from the first year to the second in the number of outside speakers used in the course has already been mentioned. The new additions for the third year of the course were Dr. Novak's and Mrs. Williamson's video tapes. Dr. Novak's video tape is entitled "Women, the Stronger Sex" and Mrs. Williamson's, "What Do They Really Do?". Other video tapes are now in process of development in subject areas where outside speakers are still desired.

The available material regarding the present day American woman is changing so rapidly that it is difficult to keep up with it. Caution is necessary in not jumping too quickly on some person's "band wagon" only to find that the author has a completely one-sided view. The careful selection of readings is even more important because of the accelerated public interest.

This course will probably always be experimental. It is hard to conceive of either the course or the resource material solidifying to such an extent that the course becomes static. Rather, experimentation will continue as staff and students, through their evaluations, indicate a need for change.


STEPHENS COLLEGE
COLUMBIA MO

Contemporary American Woman course provides direction in up-to-the-minute research. Students study opportunities and responsibilities of the mature woman. Working with children and taking part in public life reveal facets of a woman's life discussed in classes.

6. WHAT ARE THE NEW DIRECTIONS OF THIS COURSE AND THOSE THAT NEED FURTHER STUDY AND DEVELOPMENT?

The present course is new, not only on this campus but elsewhere in the country. It has been in a constant process of development and change since its inception.

The course should be basic to the education of every girl at Stephens College. At present it is developing student interest primarily through the enthusiasm of the students who have been enrolled in it. For example, the second semester of the third year over three fourths of the students in the course were friends, roommates, suitemates or fellow hall members of previous students.

The staff is very much torn between wanting the course to be available to as many students as possible on a semester basis, and the need to follow the accepted pattern of the other basic courses which is a two semester schedule for a total of six or more hours credit. The two semester schedule would follow for even greater study in depth which would be of considerable value.

The students invariably leave the course at the end of one semester wishing that it were going to continue. In fact there is strong urging from them for a continuing course of a similar nature. On the other hand, staff has contended that it is better for a student to finish a course wishing it were longer and wanting more, than for her to be glad that it is over. There have been some suggestions from thoughtful faculty that a change in name to a more "academic" title such as Cultural Anthropology I or The Status of Women would be helpful.

The student enthusiasm for the course is encouraging, and leads us to feel that so far our direction is the right one. We feel that every woman student can benefit from this study of herself in relation to the society in which she lives--in a world of turmoil and great change.

THE STEPHENS COLLEGE PROGRAM

by

Ralph C. Leyden

Director of Educational Development

THE PAST

Although Stephens College belongs to today's group of "experimenting colleges", it also belongs to the early group of experimental colleges. Although it began as a school for girls in 1833 and became Stephens College in 1870, its modern era began in the early 1900's under the leadership of James Madison Wood who served as President of Stephens College from 1912 to 1947 and that of Dr. W. W. Charters, Director of Research. Dedicated to the education of women, the College committed itself: 1) to a program fostering the growth and development of each student in terms of her own interests and the needs of society; 2) to providing a basic general education; 3) to stressing the central importance of religion and 4) to fostering experimentation in teaching and program development.

Dr. Roy Ivan Johnson in his book Exploration in General Education states the early convictions of the faculty and their leaders at Stephens in this way:

"They believed that the business of general education is to fit the student for a successful and satisfactory life, as an individual and as a member of society. This belief dictates that education accept as its primary objective the development of individual attitudes and abilities necessary to competent and complete living.... They believed that the criterion for planning and implementing all learning experience must be the needs of the student. They believed that the essential needs and interests of men and of women are different in important ways and that therefore education for women must differ substantially from the training of men. They believed that in any need-centered program each individual student is the only valid frame of reference; and they reasoned that in such a program ways must be found to individualize instruction in order to satisfy the varying needs of individuals."

Consonant with these beliefs, the College contributed to two main streams in American education during the first half of the twentieth century--the general education movement with its emphasis upon individual needs and differences as well as upon the needs of society and the development of junior colleges. The College became known as an institution where new courses were being developed in the humanities, in the social studies, in communication, in marriage and the family and in psychology in such a way as to relate the contributions of a given area to the interests and needs of students. It also became known as an institution where experimentation in more effective methods of instruction constantly accompanied the developments in program.

These emphases and beliefs have remained as permeating influences in the evolution of the Stephens pattern of education. They have guided the innovations which placed Stephens among the "experimenting" colleges and which justify its being termed an "experimental college" today.

THE PRESENT

Stephens College offers three degrees: The Associate in Arts, the Bachelor of Arts and the Bachelor of Fine Arts. The major emphasis of the College, in terms of numbers of students, is on the program leading to the two-year, Associate in Arts degree. It is intended that this program will continue to be a primary concern of the College. The Bachelor of Fine Arts degree is given in four fields: dance, music, fashion design and drama. It is expected that the enrollment in this degree program and in the Bachelor of Arts degree program will continue to be limited to a select group of students for whom these programs have particular advantages in terms of their aptitudes, interests and goals.

To carry out its program of education the College offers courses specifically designed to contribute to the general education of the student through a wide range of liberal studies and specialized courses in certain pre-vocational and vocational areas, including those of the Bachelor of Fine Arts curricula. The student's Associate of Arts program is almost entirely elective, but each student plans her program in consultation with her faculty adviser who maintains a counseling relationship with her throughout her years at the College. The heart of the general education program is the set of basic courses. These consist of English 101-102, General Humanities, Contemporary Social Issues, The Contemporary American Woman, Basic Beliefs in Human Experience (Philosophy 101-102) and Foundations of Natural Science. With the help of her adviser, the student chooses from among these basic courses and adds to them other courses which will enable her to achieve some depth of understanding in her special interest, whether this be in the field of liberal studies or pre-professional training or, as is most usual, both.

In carrying out its concern for the individual growth and development of each student, the College gives more than usual attention to the out-of-class opportunities for learning. Each hall has its own resident counselor, trained in personnel work, who works directly with students in the group living aspects of their education. The activities of the residence halls are integrated under the Civic Association, the student government organization, which is given a grant of power by the president for carrying out the functions of self-government. The extra-class activities of students which are beyond those in the residence hall are also a concern and the College provides faculty sponsorship and guidance for them.

Under a Dean of Religion, the College carries out its commitment to the importance of religion by providing a varied program of religious experiences--vespers, Sunday morning services, evening prayer, hall meditation periods and special convocations with religious emphasis. In addition, a student organization conducts a program known as the Burrall Program which includes a wide variety of opportunities for students to engage in social service projects within the community and surrounding territory. The Burrall Program also includes student arranged seminars, conferences and other special events which enable students to probe deeply into their own personal beliefs and commitments.

In carrying out its commitment to a continuous program of educational experimentation and research, the College encourages the undertaking of special projects which have specific implications for teaching and learning and also programs of study in which faculty members have particular scholarly interests. Each summer the College awards grants in both of these activities. Frequently as many as one-third of the faculty will be engaged in summer study extending from a week or two to much of the summer. Some projects are conducted as workshops with several staff members participating; others constitute individual assignments, the results of which will be shared with colleagues. The individual awards given faculty often involve foreign travel, opportunity to study off-campus or to write. In these ways the College seeks to foster a climate conducive to development of constantly more effective and efficient teaching.

EXPERIMENTATION AND DEVELOPMENT

Today the program of experimentation and development at Stephens College might be described as falling under three categories: 1) program development, 2) innovation and improvement in teaching 3) and design and construction of new facilities for learning. Obviously, all three categories are closely related and the activities under one, occasion the use for or influence the activity under another category.

PROGRAM DEVELOPMENT

In carrying out its commitment to providing a general liberal education especially during the first two college years and culminating in an Associate in Arts degree, the College has given constant attention to the development of a series of basic courses. Some of these have served in the past as prototypes for other institutions. During the past four years the College has given particular attention to the analysis, revision and development of the following set of basic courses.*

"The General Humanities course has a three-fold objective: 1) to increase the number of arts the student enjoys and understands (including architecture, literature, music, painting, sculpture and the combined arts.) 2) to develop the realization that there are certain basic principles common to all arts; 3) to introduce the student to means of formulating judgments of what comprises a valid artistic expression so that she may continue to apply what she has learned." The text for the course, written by Dr. Louise Dudley--founder of the course--and Austin Faricy has been frequently revised and is widely used in other colleges.

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* Catalogue course descriptions and other statements by the faculties concerned provide the sources of the descriptions of the basic courses presented here.

Foundations of Natural Science, the basic course in that area, has been and is undergoing an intensive reorganization and development. "Through an inter-disciplinary approach in the sciences, the course seeks to provide insights into the scientific process, in contrast to the usual acquaintance with only the scientific product. In this course the epistemological structure of science is meshed with the presentation of the 'most' significant concepts in the sciences. The course is developed in a 'logical' structure starting with the nature of matter and energy, which becomes the necessary foundation upon which to build an understanding of cellular dynamics, cellular, organismic and species continuity, and biotic and environmental interrelationships. It deals with both process and product. Laboratory work allows the student to gather first-hand experiences in the attack on problems, and the management of physical apparatus, both simple and complex in the emancipation of data."

Basic Beliefs in Human Experience, the beginning course in philosophy, is particularly indigenous to Stephens. Starting from the premise that philosophical and religious concerns are of great importance in human existence, the course has as its objective making the student aware of our philosophic roots and aware of the perennial and basic questions man asks. It has as its goal the development of a philosophic attitude and of a personal philosophy.

A course titled The Contemporary American Woman is the newest among the basic courses at the College. Its objective is to acquaint the young woman with some of the major and important facts about woman's historic role in our own culture and, comparatively, in other cultures. With such a background the course helps the student identify and analyze the role and problems of the contemporary American woman. Together with the course, Marriage and Family, it attempts to give students an understanding of what today's culture may demand of them and of what opportunities for self-realization exist.

"The Contemporary Social Issues course sets as its objectives: 1) to introduce the student to the basic contemporary social issues which every American must face; 2) to teach the individual how to study controversial social questions calmly and intelligently with an emphasis upon rational analysis rather than upon emotion and prejudice; 3) to develop in the individual such a profound interest in the solution of these issues that he will always take an active--and hopefully intelligent--part in civic life. Through wide required reading and much class discussion, the following topics are treated: The Nature of Social Change, Democracy and the "Isms", The Politics of American Democracy, Personal and Social Disorganization, Race and Cultural Minorities, The American Economic System, American Foreign Policy and Living in the Mass Society."

English 101 and 102, formerly Communication, through instruction in both written and oral communication, though primarily the former, concentrates on the study of the functions of mind: inquiry, judgment and a representation of passion. The course syllabus describes these functions in the following manner. "(1) The process of inquiry involves the student in a study of informal logic and the principles of investigation. He is expected to demonstrate his ability in inquiry by preparing an investigative paper drawing his subject from any of the academic disciplines. (2) The process of judgment takes the student beyond the determination of what is and into a consideration of worth or value. He studies the techniques of persuasion as the means of organizing logical inquiry to substantiate careful judgment. (3) A study of the representation of passion through literary expression brings the student to a consideration of poetry, drama and fiction. He studies literature as a means of communication: a use language which allows a common, symbolic participation into the emotional life of other men."

Ideas and Living Today

A course titled Ideas and Living Today is illustrative of program innovation at Stephens. Inasmuch as the curriculum at Stephens is primarily elective, the faculty felt a need to develop a required course which would give students a common impact for the discussion of important ideas. Consequently, the course Ideas and Living Today was developed with the objective of providing an introduction to a liberal education. Drawing its subject matter from contemporary issues in the arts, in science, in the social sciences, it attempts to give students an introduction to the meaning of a liberal education. Closed circuit television is the medium chosen for teaching it. This was necessitated by a desire to have all students hear the same presentation simultaneously. Following twenty-minute presentations by television, small groups of students discuss the topic under the leadership of a member of the faculty. These faculty are drawn from all departments in the College.

The House Plan

The House Plan of organization is another example of program experimentation and development. Initially begun under a grant from the Ford Foundation, this plan of organization has now become a regular part of the Stephens program. Essentially, it is a plan whereby approximately 100 students are assigned to a given dormitory. Previously they have elected to take a common core of subjects. These are General Humanities, Basic Beliefs in Human Experience, Contemporary Social Issues and English. In addition they take the required course Ideas and Living Today. Five faculty are assigned to the residence hall. They teach the courses mentioned to the students in the hall and serve as their advisers. One of the group is the resident hall counselor. Through this plan the College attempts to relate constructively the activities of both living and learning. Inasmuch as the major program of the students is conducted by a small group of faculty, it is possible to give the group considerable autonomy in the planning of schedules, teaching programs, experimentation and other activities. The group has employed a wide range of methods of teaching: independent study, concentration periods when no classes are held, supervised field study in New York City, programmed learning, large group instruction and conference teaching. Several of their innovations are being adapted in other parts of the campus.

Bachelor of Fine Arts

Recently inaugurated at Stephens is the Bachelor of Fine Arts program. This is a program in which students work continuously through three academic years and two summers. The course of study combines specialization with extensive study in the liberal arts. The fields in which a degree may be taken include dance, theater, music and fashion design.

Bachelor of Arts

The most recent inclusion in the Stephens program is the Bachelor of Arts degree. In the Bachelor of Arts program the student chooses a field of concentration and in consultation with the head of the appropriate division, develops a detailed schedule of activities. These include both common and specialization seminars as well as a combination of courses, drawn from any department in the College, which have demonstrable meaningfulness in terms of the specific personal and educational goals of the candidate. The traditional major and minor sequence is not employed.

Continuing Education

In keeping with its dedication to the education of women, the College has studied and continues to study what role it might reasonably play in contributing to the continuing education of women generally and of its graduates in particular. The faculty of the humanities department developed an adult education series which was widely used. Currently the College has conducted week-long seminars for women and is cooperating with universities in large metropolitan centers to acquaint Stephens alumnae with the educational opportunities existing and available to them.

The above examples serve as illustrations of various approaches to program development at Stephens College. This is not limited, however, to the examples given. Experimentation and restudy are constantly encouraged.

INNOVATION AND DEVELOPMENT IN TEACHING

Many areas of instruction illustrate the constant emphasis upon teaching improvement at Stephens College.

Language

During the past three years instruction in beginning language has undergone a radical revision. Basing the reorganization on modern structural linguistics members of the staff have employed an intensive accompaniment of visual aids. They have adapted automated devices, such as the Perceptoscope to the showing of both still and motion pictures intermittently in order to convey better the meaning of vocabulary and of more complex concepts. They have employed both language-learning laboratories and telephonic listening stations around the campus.

Science

In science the staff has developed a programmed laboratory manual to replace stereotyped traditional manuals. Lectures accompanied by original photography mounted in slides, have been made available to both instructors and students through automation. These materials are used both in class instruction and in independent study. Presently they include series on evolution and on ecology. Currently also the science faculty is experimenting with both large group and team teaching techniques.

Programmed Instruction

Programmed materials have been developed for units in the teaching of logic and have been used both in the course Basic Beliefs in Human Experience and in freshman English. Other materials have been developed for review and instruction in fundamentals of English.

Amplified Telephone Instruction

One of the most exciting and interesting experiments in teaching has been that employing the amplified telephone technique. Starting from initial experimentation in the teaching of government classes in 1958 the College has used lecturers and interviewees in courses in social studies, business, philosophy, literature and mathematics. During the year 1963-64 an experiment involving the teaching of three different courses for a group of eleven cooperating colleges was conducted at Stephens. The three courses included a seminar on the *Teaching of Science*, a course titled *Great Issues in Contemporary Society* and a third course *American Life as Seen by Contemporary Writers*. In each of these courses the program emanated from the Stephens campus, but the master teachers of the courses spoke from their homes or offices from all over the United States and in some instances from abroad. Thus the faculty of the courses represented a truly international "who's who" kind of faculty. The experiment was underwritten by a special grant from the Fund for the Advancement of Education. It demonstrated that it is possible and feasible for a group of interested colleges to employ the services of otherwise unattainable individuals. Since all the colleges in this experiment were of very modest resources, several of them being Negro colleges, the technique shows promise of increasing the faculty resources of such institutions.

In the general humanities course members of the teaching faculty make much use of many and varied visual and audio materials. One of the more interesting developments has been the preparation of lecture materials on tape recordings and synchronized, where this is useful, with slides. Series have been developed on the principles of architecture, the geometry of style in painting and the techniques of drawing. Audio-tapes have been developed for the teaching of the basic principles of music. Elements in the theory of music are being taught in an experimental section through the use of overhead projectors. In this experiment students work with an overhead projector when doing classroom exercises in original compositions. The technique permits the instructor to project for all to see the work of any given student for analysis and criticism.

Television is increasingly used in instruction. A series of 13 lectures has been produced and is being recorded on videotape to be used as a core of instructional materials in the freshman English course. Projected are similar lecture series in the Contemporary American Woman course, in humanities and in psychology. Closed circuit television is also employed for the showing of assigned films in the child study course. Even in the extra-class program of the College the closed circuit television serves as the medium of instruction during the early orientation periods in each college year.

Patterns of Teaching

Several other variations in teaching are receiving current attention at Stephens. Several different patterns of the scheduling of classes are being tried out under the House Plan organization. Most of the divisions of the College are experimenting with the teaching of large classes for lecture presentations. These are supplemented by small group discussion and individual conference sessions. Another pattern being explored in several areas is team teaching. First tried in the required televised Ideas and Living Today course, the technique is being exploited particularly in the teaching of beginning psychology.

Having had a long interest in and use of audio-visual aids to teaching, the faculty of Stephens has been experimenting with the utilization of some of the newer media. These experiments and the availability of the newer educational media have greatly influenced the third category of experimentation and development--new facilities for learning.

PHYSICAL FACILITIES FOR LEARNING

The third category that represents innovation and development at Stephens is in the area of planning and building new facilities for instruction. Its new learning center in the James Madison Wood Quadrangle represents one of the more unique new facilities on college campuses. It was chosen as one of the twelve outstanding facilities to be included in the Airborne Institute conducted under the auspices of the School Planning Laboratory in the summer of 1964.

Planning of the learning center was greatly aided by substantial grants from the Educational Facilities Laboratories. Out of a conference titled New Frontiers in Learning, of national educators and others interested in the future of education, grew the principles used as guidelines for the planning of the facilities. The principle of flexibility was applied to the design of spaces and buildings in anticipation of the changes expected to occur in the pattern of educational needs. Several spaces are designed to serve multiple purposes--designed to be used in as many ways and for as many purposes as the College's educational demands require and architectural design makes feasible. Another basic principle of planning was that of providing for a variety of both resources and spaces. The learning center provides for the tremendous new range of resources--films, records, videotapes, slides and combinations of these in addition to the old and proven resources of books and people. The basic principles of ready availability of materials and close proximity of materials, spaces and people are also observed in the planning. The five buildings of the Quadrangle are all connected at one level. The relationship between classrooms, offices, seminar rooms, library and laboratories is enhanced by their being related parts of a unified plan.

The objectives which further governed the design and equipping of the learning center were:

1. To create an environment most favorable to learning.
2. To provide space and facilities designed for versatility and maximum utilization.
3. To make available the wealth of modern resources in educational materials and aids for the study of the arts and sciences.
4. To encourage the student in her capacity for self-education.
5. To enable the teacher to utilize his time and ability more effectively.

PRIMARY FEATURES OF THE LEARNING CENTER

Of primary importance in the design and equipping of the learning center is the basic communication system which forms the electronic heart of the facility. A dual coaxial cable augmented by many pairs of audio wires permits the sending and receiving of audio and visual signals throughout the entire center. It is possible to originate or receive television in any classroom or laboratory and in any auditorium, gallery or library area. The inclusion of electronic and mechanical aids in the Stephens learning center is based upon a "systems" approach to the use of technology in education. This design incorporates the large scale communication system just mentioned together with a variety of meaningfully related educational media devices. The entirety makes available and feasible a multi-media support of both discrete and interrelated fields of instruction. Each classroom and teaching auditorium or lecture room constitutes a sub-system. In each of these spaces an electronic console permits the teacher to control from his desk the tuning in of television, the projection from slides, tape or film strip projectors, the receiving or playing of phonograph recordings or taped recordings and control of sound--either stereophonic or monaural--and the lighting. By having his illustrative material preset or programmed in advance, the instructor has at his command any desired variety of illustrative and supporting materials he may wish.

The entire learning center is so designed as to provide a range of sizes of space for differing instructional purposes. Faculty offices are of such a size as to permit small seminar groups of five to ten students, classrooms will accommodate up to 40-45 students depending upon the formality of the seating arrangement. Pairs of classrooms divided by operable walls may be used individually or thrown together to accommodate as many as 80-90 students. An arena classroom, also divisible by an operable wall, will accommodate 60 students in each half or 125-150 as a single room. This room also is so designed as to permit its use for theatre-in-the-round. A lecture theater will accommodate 128 students. It is also capable of doubling as a small recital area or actor's theater. A 300-seat teaching auditorium provides for large group instruction and previously existing auditoriums accommodate 600 students and 2,900 respectively.

The largest and physically the most dominating building of the learning center is the resources library. Its ground floor is integrated with the master communication system. Here an under-floor network of ducts makes possible the installation of any electronic device that may prove useful to teaching or learning. This floor is equipped with learning carrels similar in style and equipment to language laboratory booths. Here the student can study preassigned recorded material. She can check out individual television acts forprogrammed materials. Here also are listening rooms accommodating 3-4 students where they may play materials assigned for study in the humanities, drama, English or other subjects. Here also are carrels so designed as to provide wall space for the display of pictures which are later checked out for student use in their dormitory rooms. These display areas then convert into carrels.

The three remaining floors of the library contain open stacks, many secluded reading and study areas, individual carrels, browsing areas, conference rooms and an informal reading area around an open fireplace on the top floor of the library. Carpeted throughout, the library is an experiment in providing pleasant surroundings which are highly conducive to concentrated study and intensive learning. The attempt was to create a non-institutional appearing, but institutionally functioning library facility. The design and arrangement of furnishings and the equipping with the full range of learning resources from automated devices to time-proven books makes it such a place.

The Stephens College learning center project is especially significant because of its departure from previous educational patterns. The Educational Facilities Laboratories has commented: "There have never been gathered together on an American campus all such means of instruction. This attempt to saturate one (area) with all the tools available and appropriate for instruction should help answer many questions...."

THE FUTURE

In 1959-60 the faculty and administration of Stephens College engaged in a college-wide self study. As a result of this study the College has projected a ten-year plan. Significant features of this ten-year plan include increase of the College enrollment to approximately 2,400 or 2,500 (in comparison to the present 1,850). This growth is expected to occur primarily in the upper division of the College whose programs lead to the Bachelor of Arts and the Bachelor of Fine Arts degrees. To accommodate this increase a new dormitory quadrangle is being erected, its design influenced by the College's experience with the desirability of closely relating living and learning as in the House Plan organization. The College looks forward to an increasing strengthening of its faculty and a continuing encouragement resulting in better teaching and constant program development. Finally, the College looks forward to a continued identification as an experimenting college. In a statement reaffirming the historical educational stance of Stephens College and projecting its commitments into the future, President Seymour A. Smith expressed his views on the need for the experimenting college.

"Our hope, as I see it, lies in the possibility of the emergence of a great number of institutions, large and small, infected with the experimenting spirit. Actually this is already coming about, for many of the larger institutions are being forced into experimenting with new patterns, new methods and new resources by virtue of the almost impossible situations they currently confront... For the good of higher education we need a host of institutions working on one or several of the more promising avenues for improving learning, trying new patterns, doing the necessary research, and sharing their experiences with others."

Stephens College in its looking to the future through its ten-year plan has committed itself to this task and hopes that in addition to serving its own student body, it may make some contributions to education at large.

Note: This paper was prepared for the Colloquium on Experimental Colleges, Florida State University, Tallahassee, Florida, April 5-8, 1964 and, with other papers, appears in Experimental Colleges, edited by Hugh Stickler, Florida State University, 1964, Ch. 3, pp. 33-47.

PRINCIPLES FOR DEVELOPMENT OF BASIC COURSES

STEPHENS COLLEGE, COLUMBIA, MISSOURI

by

James G. Rice

December, 1961

1. **There should be at the center of course planning an underlying theory of the structure of the subject and of the disciplines involved. Discussion of the concept of the structure should not be limited to a unit; it should be a pervasive objective related to all examples, exercises, etc.**

2. **Content (examples used, issues examined, instances analyzed) chosen to reveal the structure should be significant (relevant to our culture and meaningful to students). It should at the same time be typical of the area of knowledge with which the basic course deals.**

3. **Issues, examples and instances should be examined in depth. Depth models of inquiry rather than coverage should be the aim if either is to be sacrificed.**

4. **All basic courses should aim at perspective: perspective in time (historical perspective) and in place (intercultural perspective). The important thing is not dates, names and events but a sense of tradition, of a past and of a future; of change; of alternate views and variety of approach.**

5. **The courses should be behavior-centered. Habits of approaching a problem, attitudes, performance and appreciation should take precedence over**

mastery of encyclopaedic facts as outcomes of the courses.

6. There should be an underlying logic in the sequence of materials dealt with. To state the principle negatively, the "rosary" kind of organization in which bead after bead is added to the string should be avoided. Examples of considerations in developing the sequences: simple to complex, more familiar to the less familiar, concrete to abstract, experience to theory, instance to generalization.

7. Courses should be introduced to students on the assumptions that the materials being dealt with are already of concern to them and that the various epistomologies are ones which they are already using, albeit at an unconscious, haphazard, unrefined level. They must be helped to _see_ and _sense_ that the methodologies and approaches basic to the areas are natural to all human beings. The teacher's function is, as Socrates observed, that of evoking into consciousness and articulation for cultivation that which is already in them as human beings.

NEW TRENDS IN LEARNING THEORY AND CURRICULUM CONSTRUCTION

A BIBLIOGRAPHY

November, 1965

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Events of the last decade have forced upon educators an acknowledgment of the tentativeness of all mere "facts" and an awareness of their short life in the minds of students. Responses have been a new emphasis in the curriculum on "learning to learn" and on the development in students of abilities and habits of continuous learning; and an emphasis on those outcomes which do endure in the learner: methods of inquiry, concepts, principles, processes, etc. An older ideal of "coverage" in curriculum construction has yielded to a search for "representative" ideas, "constructs" and experiences and an awareness that "content" chosen, however important in itself, is more important as "vehicle" for fostering and developing these more significant and pervasive outcomes.

This short annotated bibliography is intended as a guide to this new thinking on learning theory and curriculum construction. It is intended particularly for college faculty members who are engaged in bringing their courses and methods of teaching abreast of the best that is now known about how people learn and how learning experiences (courses) can be designed to increase the likelihood that significant learning will take place.

Alexander, William M. Changing Curriculum Content. Report of the Conference on Curriculum Content held in Chicago, 1963. Washington: Association for Supervision and Curriculum Development, 1964, pp. 26.

Discusses three "fairly common" changing emphases in curriculum and instruction: (1) Emphasis on formation and application of concepts; (2) teaching the skills of continued learning; (3) the development and use of varied instructional materials. Sees the emphasis on concepts as a correction to the all-too-frequent practice of making "multitudinous background facts, principles and processes so basic as to limit or inhibit the learner's full understanding of underlying structures or concepts which should persist in his approach to the subject." Notes that "the emphasis

on the learner's own formation of basic concepts aims to develop skills of learning as a by-product."

Bloom, Benjamin, S. (ed.). *Taxonomy of Educational Objectives: Cognitive Domain*. New York: Longmans, Green and Co., 1956, pp. 207.

A guide for the preparation and evaluation of objectives in the realm of cognition at all levels of education.

Bruner, Jerome S. *The Process of Education*. Cambridge, Mass.: Harvard University Press, 1960, pp. 97.

A report of a conference of scientists, psychologists and educationists brought together to discuss the problems of teaching various academic disciplines.

Bruner, Jerome S. *On Knowing: Essays for the Left Hand*. Cambridge, Mass.: Harvard University Press, 1962, pp. 165.

Foreshadows a theory of education for that "part of man's mind that can never be completely satisfied by the right-handed virtues of order, rationality and discipline."

Denemark, George W. "Concept Learning: Some Implications for Teaching," *Liberal Education*, March, 1965, pp. 54-70.

A discussion of four educational trends associated with concept learning and the higher mental processes: (1) emphasis upon the structure of knowledge and method of inquiry in each field; (2) viewing education at every level as making important contributions to the understanding of key principles and concepts; (3) a concern for methods of inquiry, processes of thinking, ways of finding out; (4) the demand for coordination of educational endeavors across school, community, and state boundaries.

Goodlad, John I. *School Curriculum Reform in the United States*. New York: The Fund for the Advancement of Education, 1964, pp. 95.

Describes the schemes or patterns of organization underlying the current massive reformulation of the curriculum--patterns emphasizing basic principles and concepts running longitudinally through the curriculum, in contrast to a pattern of topics prescribed horizontally across grade levels so prevalent in past decades.

Hilgard, Ernest R. (ed.). *Theories of Learning and Instruction*. The sixty-third Yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press, 1964, pp. 430.

Not recommended as a "first book" for the typical faculty member. Most of the chapters, written by specialists for specialists, are quite technical in style and theoretical in presentation. Sample sentence: "The hippocampus, by inhibiting the succession of unrelated inputs, allows continuing activity of the amygdala to stabilize the system." It is included in this list for the "overview" of the field which the chapters by Frederick J. McDonald and the editor, Dr. Hilgard, provide.

Jenkins, William A. (ed.). *The Nature of Knowledge*. Milwaukee: University Wisconsin, 1961, pp. 94.

This small significant volume is made up of papers presented at a conference sponsored by the School of Education at the University of Wisconsin, Milwaukee, under a grant from the Uhrig Foundation. Included: Earl J. Johnson, "Ways of Knowing"; Arthur W. Foshay, "Knowledge and the Structure of the Disciplines"; Arno A. Bellack, "Conceptions of Knowledge". A brief quotation from the summary is suggestive of the problems dealt with: "The worth of mere description--the major portion of many college courses--must be questioned. The structure of knowledge cannot be equated with ordering descriptions. Ordering descriptions is a static function, perhaps best left to book makers, esoteric scholars, and quiz masters. Those who educate perhaps have a more dynamic task."

Krathwohl, David R., Bloom, Benjamin S., and Masia, Bertram B. *Taxonomy of Educational Objectives: Affective Domain*. New York: David McKay Company, Inc., 1964, pp. 196.

A guide for the preparation and evaluation of objectives which emphasize a feeling tone, an emotion, or a degree of acceptance or rejection.

Phenix, Philip H. *Realms of Meaning: A Philosophy of the Curriculum for General Education*. New York: McGray-Hill Book Company, 1964, pp. 391.

An analysis of the basic discipline classifications with particular reference to "methods of inquiry," "representative ideas," and "the problem of selection in the curriculum."

Schwab, Joseph J. "The Concept of the Structure of a Discipline," *The Educational Record*, July, 1962, pp. 197-205.

Makes the point that "a body of concepts--commitments about the nature of a subject matter, functioning as a guide to inquiry--is one component of the structure of a discipline" but that "the syntactical structure of the discipline--the pattern of its procedure, its method, how it goes about using its conceptions to attain its goals--is equally important and that the different disciplines have different starting points and different goals and that consequently the path, the syntax, the procedure of discovery and verification for each is also different."

Schwab, Joseph J. and others. *The Structure of Knowledge and the Curriculum.* Chicago: Rand-McNally, 1964, pp. 105.

This collection of addresses at a conference on the structure of knowledge and the curriculum at San Jose State College pulls together in a small volume much of the current theory on the use of structure and concepts as the basis for college curriculum development.

Smith, Houston. *Condemned to Meaning.* New York: Harper and Row, 1965, pp. 94.

Conceives of meaning as that which "emerges as man answers in continuing dialogue the beckonings that come from a world that envelops us while transcending us and all that we know." Thus meanings are "invented", "discovered", "constructed". Benjamin Whorf notes: "The categories and types that we isolate from the world of phenomena we do not find there because they stare every observer in the face; on the contrary, the world is presented to us in a kaleidoscopic flux of impressions which has to be organized by our minds.... We cut nature up, organize it into concepts, ascribe significance as we do, largely because we are parties to an agreement to do it in this way." P. 43. The business of education must be not only "concepts" but should include "subcepts" as well.

Taba, Hilda. *Curriculum Development: Theory and Practice.* New York: Harcourt, Brace and World, Inc., 1962, pp. 529.

Advocates the designing of a total curriculum planned so as to move from simple to complex illustrations of fundamental concepts or representative ideas, from lesser to greater precision of analysis in the intellectual processes involved, and from limited to broad application of concepts, with students at all levels in the program working on objectives involving knowledge, comprehension, application, analysis, synthesis and evaluation.

Watson, Goodwin. *What Psychology Can We Trust?* New York: Bureau of Publications, Teachers College, Columbia University, 1961, pp. 19.

Acknowledges controversies among the various schools of psychology concerning learning theory and then proceeds to list clearly and briefly fifty propositions, important for education, "with which few knowledgeable psychologists of any 'school' will disagree." The propositions are grouped under such headings as "learning process", "motivation", "teaching methods", and "evaluation".

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